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&lt;210&gt; 3314

&lt;211&gt; 537

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3314

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Ala	Arg	Thr	Ala	Val	Lys	Arg	Arg	Pro	Gly	Ala	Gly	Arg	Val	Gly	Gly	35	40	45	
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Pro	Tyr	Leu	Gly	Arg	Arg	Asp	Arg	Gly	Lys	Gly	Arg	Gln	Arg	Gln	Ala	260	265	270	
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His	Gly	Pro	Leu	Leu	Pro	Leu	Pro	Ser	Arg	Tyr	Arg	Met	Gly	Ser	Arg	290	295	300	
Asp	Thr	Pro	Glu	Leu	Val	Ala	Tyr	Pro	Leu	Pro	Gln	Ala	Ser	Ser	Ser	305	310	315	320
Tyr	Met	His	Gly	Gly	Asn	Pro	Ser	Gly	Ser	Val	Val	Met	Val	Ser	Gly	325	330	335	
Leu	His	Gln	Leu	Lys	Met	Asn	Cys	Ser	Arg	Val	Phe	Asn	Leu	Phe	Cys	340	345	350	
Leu	Tyr	Gly	Asn	Ile	Glu	Lys	Val	Lys	Phe	Met	Lys	Thr	Ile	Pro	Gly	355	360	365	
Thr	Ala	Leu	Val	Glu	Met	Gly	Asp	Glu	Tyr	Ala	Val	Glu	Arg	Ala	Val	370	375	380	
Thr	His	Leu	Asn	Asn	Val	Lys	Leu	Phe	Gly	Lys	Arg	Leu	Asn	Val	Cys	385	390	395	400
Val	Ser	Lys	Gln	His	Ser	Val	Val	Pro	Ser	Gln	Ile	Phe	Glu	Leu	Glu				



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 Lys Val Phe Asp Ala Lys Pro Ser Ala Lys Thr Leu Ser Gly Leu Leu  
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 <211> 934  
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 <213> Homo sapiens

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<213> Homo sapiens

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Val Pro Lys Thr Ser Leu Ser Ser Pro Pro Trp Pro Glu Val Val Leu  
35 40 45  
Pro Asp Pro Val Glu Glu Thr Arg His His Ala Glu Val Val Lys Lys  
50 55 60  
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Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser Glu Asp Leu Ile  
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Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr Leu Leu Gly Lys  
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<212> DNA  
<213> Homo sapiens

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&lt;210&gt; 3318

&lt;211&gt; 253

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3318

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		20					25					30			
Glu	Lys	Arg	Glu	Glu	Arg	Arg	Arg	Arg	Glu	Leu	Glu	Lys	Lys	Arg	Leu

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Lys Leu Leu Lys Lys Pro Glu Lys Gly Glu Glu Pro Thr Thr Glu Lys		
85	90	95
Pro Lys Glu Arg Gly Glu Glu Ile Asp Thr Gly Gly Gly Lys Gln Glu		
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Ser Cys Ala Pro Gly Ala Val Val Lys Ala Arg Pro Met Glu Gly Ser		
115	120	125
Leu Glu Glu Pro Gln Glu Thr Ser His Ser Gly Ser Asp Lys Glu His		
130	135	140
Arg Asp Val Glu Arg Ser Gln Glu Gln Glu Ser Glu Ala Gln Arg Tyr		
145	150	155
His Val Asp Asp Gly Arg Arg His Arg Ala His His Glu Pro Glu Arg		
165	170	175
Leu Ser Arg Arg Ser Glu Asp Glu Gln Arg Trp Gly Lys Gly Pro Gly		
180	185	190
Gln Asp Arg Gly Lys Lys Gly Ser Gln Asp Ser Gly Ala Pro Gly Glu		
195	200	205
Ala Met Glu Arg Leu Gly Arg Ala Gln Arg Cys Asp Asp Ser Pro Ala		
210	215	220
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225	230	235
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<210> 3319  
 <211> 1541  
 <212> DNA  
 <213> Homo sapiens

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 <212> PRT  
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 35 40 45  
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 50 55 60  
 Tyr Glu Ile Lys Met Ala Phe Val Leu Trp Leu Leu Ser Pro Tyr Thr  
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 Lys Gly Ala Ser Leu Leu Tyr Arg Lys Phe Val His Pro Ser Leu Ser  
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 Arg His Glu Lys Glu Ile Asp Ala Tyr Ile Val Gln Ala Lys Glu Arg  
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 Ser Tyr Glu Thr Val Leu Ser Phe Gly Lys Arg Gly Leu Asn Ile Ala

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Gly Arg Leu Arg Ser Phe Ser Met Gln Asp Leu Arg Ser Ile Ser Asp
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Ala Pro Ala Pro Ala Tyr His Asp Pro Leu Tyr Leu Glu Asp Gln Val
      165      170      175
Ser His Arg Arg Pro Pro Ile Gly Tyr Arg Ala Gly Gly Leu Gln Asp
      180      185      190
Ser Asp Thr Glu Asp Glu Cys Trp Ser Asp Thr Glu Ala Val Pro Arg
      195      200      205
Ala Pro Ala Arg Pro Arg Glu Lys Pro Leu Ile Arg Ser Gln Ser Leu
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Arg Val Val Lys Arg Lys Pro Pro Val Arg Glu Gly Thr Ser Arg Ser
225      230      235      240
Leu Lys Val Arg Thr Arg Lys Lys Thr Val Pro Ser Asp Val Asp Ser
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 <211> 1536  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 3322

&lt;211&gt; 454

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3322

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Thr	Pro	Thr	Ser	Val	Ile	Gln	Val	Thr	Asn	Leu	Ser	Ser	Ala	Val	Thr	35	40	45	
Ser	Glu	Gln	Met	Arg	Thr	Leu	Phe	Ser	Phe	Leu	Gly	Glu	Ile	Glu	Glu	50	55	60	
Leu	Arg	Leu	Tyr	Pro	Pro	Asp	Asn	Ala	Pro	Leu	Ala	Phe	Ser	Ser	Lys	65	70	75	80
Val	Cys	Tyr	Val	Lys	Phe	Arg	Asp	Pro	Ser	Ser	Val	Gly	Val	Ala	Gln	85	90	95	
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Cys	Ala	Glu	Gly	Lys	Ile	Pro	Glu	Glu	Ser	Lys	Ala	Leu	Ser	Leu	Leu	115	120	125	
Ala	Pro	Ala	Pro	Thr	Met	Thr	Ser	Leu	Met	Pro	Gly	Ala	Gly	Leu	Leu	130	135	140	
Pro	Ile	Pro	Thr	Pro	Asn	Pro	Leu	Thr	Thr	Leu	Gly	Val	Ser	Leu	Ser	145	150	155	160
Ser	Leu	Gly	Ala	Ile	Pro	Ala	Ala	Ala	Leu	Asp	Pro	Asn	Ile	Ala	Thr	165	170	175	
Leu	Gly	Glu	Ile	Pro	Gln	Pro	Pro	Leu	Met	Gly	Asn	Val	Asp	Pro	Ser	180	185	190	
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<212> PRT  
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PCT/US00/08621

WO 00/58473

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Pro Val Met Leu Arg Val Leu Tyr Pro Pro Lys Thr Pro Thr Met Met  
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Val Phe Val Glu Pro Glu Gly Gly Leu Arg Gly Ile Leu Asp Cys Arg  
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115 120 125  
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130 135 140  
His Val Leu Ala Ser Pro Asn Ala Leu Arg Val Asp Ile Glu Ala Leu  
145 150 155 160  
Arg Pro Ser Asp Gln Gly Glu Tyr Ile Cys Ser Ala Ser Asn Val Leu  
165 170 175  
Gly Ser Ala Ser Thr Ser Thr Tyr Phe Gly Val Arg Ala Leu His Arg  
180 185 190  
Leu His Gln Phe Gln Gln Leu Leu Trp Val Leu Gly Leu Leu Val Gly  
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<210> 3331  
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<213> Homo sapiens

<400> 3331

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<212> PRT  
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<211> 672

<212> PRT

<213> Homo sapiens

<400> 3334

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Ala	Ala	Val	Gln	Pro	Ala	Glu	Val	Thr	Val	Glu	Val	Gly	Glu	Asp	Leu
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His	Met	His	His	Val	Arg	Asp	Arg	Glu	Met	Pro	Glu	Ala	Leu	Glu	Phe
	50					55				60					
Asn	Leu	Ser	Ala	Asn	Pro	Glu	Ser	Ser	Thr	Ile	Phe	Gln	Arg	Asn	Ser
65				70						75				80	
Gln	Thr	Glu	Ala	Leu	Glu	Phe	Asn	Pro	Ser	Ala	Asn	Pro	Glu	Ala	Ser
			85					90					95		
Thr	Ile	Phe	Gln	Arg	Asn	Ser	Gln	Thr	Asp	Val	Val	Glu	Ile	Arg	Arg
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			165					170					175		
Leu	His	Ser	Phe	Ala	Val	Ser	Thr	Val	His	Ile	Met	Lys	Lys	Arg	Asn
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			245						250					255	
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		260						265					270		
Gly	Met	Leu	Leu	Lys	Arg	Ser	Gly	Lys	Trp	Leu	Lys	Thr	Trp	Lys	Lys
	275						280					285			
Lys	Tyr	Val	Thr	Leu	Cys	Ser	Asn	Gly	Met	Leu	Thr	Tyr	Tyr	Ser	Ser
	290					295					300				
Leu	Gly	Asp	Tyr	Met	Lys	Asn	Ile	His	Lys	Lys	Glu	Ile	Asp	Leu	Gln
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<211> 477
<212> DNA
<213> Homo sapiens
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120
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<210> 3336

<211> 59

<212> PRT

<213> Homo sapiens

<400> 3336

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		20						25					30		
Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly	Gln	Tyr	Tyr	Cys	Ser	Pro	Cys
		35					40					45			
His	Trp	Asn	Ala	Leu	Ala	Val	Ile	Pro	Ala	Arg					
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<210> 3337

<211> 679

<212> DNA

<213> Homo sapiens

<400> 3337

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<210> 3338  
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 <212> PRT  
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 35 40 45  
 Arg Val Arg Glu Arg Asp Arg Glu Arg His Arg Asp Arg Gln Arg Pro  
 50 55 60  
 Lys Gln Lys Arg Gln Thr Ala Lys Thr Lys Gln Asn Gln Cys Lys Leu  
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<210> 3339  
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 <212> DNA  
 <213> Homo sapiens

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 1320  
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 1341

&lt;210&gt; 3340

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3340

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		20					25					30			
Trp	Ala	Gly	Phe	Ile	Ile	Leu	His	Cys	Glu	Ile	Ala	Leu	Gln	Cys	Ile
	35					40					45				
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	50				55				60						
Asp	Ser	Cys	Ile	Gln	Met	Ser	Lys	Val	Phe	Val	Ala	Thr	Tyr	Tyr	Ile
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Ala	Tyr	Thr	Gln	Asn	His										
				85											

&lt;210&gt; 3341

&lt;211&gt; 1132

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3341

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960  
ggcaagccca gtgacatgtg ggccctgggc gtggtgctct tcaccatgct gtatggccag  
1020  
ttcccccttct acgacagcat cccgcaggag ctcttccgca agatcaaggc tgccgagtat  
1080  
accattcctg aggatggacg ggtttctgag aacaccgtgt gtctcatccg ga  
1132

&lt;210&gt; 3342

&lt;211&gt; 308

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3342

Met	Lys	Arg	Arg	Ala	Ser	Asp	Arg	Gly	Ala	Gly	Glu	Thr	Ser	Ala	Arg
1				5				10						15	
Ala	Lys	Ala	Leu	Gly	Ser	Gly	Ile	Ser	Gly	Asn	Asn	Ala	Lys	Arg	Ala
			20					25					30		
Gly	Pro	Phe	Ile	Leu	Gly	Pro	Arg	Leu	Gly	Asn	Ser	Pro	Val	Pro	Ser
		35					40					45			
Ile	Val	Gln	Cys	Leu	Ala	Arg	Lys	Asp	Gly	Thr	Asp	Asp	Phe	Tyr	Gln
	50					55					60				
Leu	Lys	Ile	Leu	Thr	Leu	Glu	Glu	Arg	Gly	Asp	Gln	Gly	Ile	Glu	Ser
65				70				75						80	
Gln	Glu	Glu	Arg	Gln	Gly	Lys	Met	Leu	Leu	His	Thr	Glu	Tyr	Ser	Leu
			85					90						95	
Leu	Ser	Leu	Leu	His	Thr	Gln	Asp	Gly	Val	Val	His	His	His	Gly	Leu

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<210> 3343
<211> 594
<212> DNA
<213> Homo sapiens
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<400> 3343
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60
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120
ttcagcatga actgggtcgt gggcagcgcg gacctggaga ttatcaacgc caccactggg
180
cggaggagct gtggggggccc atcccggtc tgcaagcacg tgctgtctgc acggtgggcy
240
cggctgtatg gcaggctgag cacacggaca ccagccctg gagacacgcc ctccatgtac
300
tgtgaggcca agctggggggc gcacacctac cagtctgtga aacagcagct gttcaaggcc
360
tttcagaagg ctggcctggg cacctgggtg aggaaaccac cggagcagca gcagtttcta
420
ctgactctct aggctgcggg ctcttggtg ctggagctga gcgggacgct ggagggatgg
480
gaccgtgtct gggggggcgac gtggcgggtc ggccggttcc ctgcattcgt tttactttgg
540
tgtcccagaa acacgcgagt gtgcaatgtt tggacgagca aaaaaaaaaa aaaa
594
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<210> 3344  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 3344  
 Arg Val Met Ser His Arg Met Glu Gly Val Gly Gln Leu Pro Ala Ser  
 1 5 10 15  
 Tyr Arg His Asn Arg Pro Leu Leu Ser Gly Val Ser Asp Thr Glu Ala  
 20 25 30  
 Arg Gln Pro Gly Lys Ser Pro Pro Phe Ser Met Asn Trp Val Val Gly  
 35 40 45  
 Ser Ala Asp Leu Glu Ile Ile Asn Ala Thr Thr Gly Arg Arg Ser Cys  
 50 55 60  
 Gly Gly Pro Ser Arg Leu Cys Lys His Val Leu Ser Ala Arg Trp Ala  
 65 70 75 80  
 Arg Leu Tyr Gly Arg Leu Ser Thr Arg Thr Pro Ser Pro Gly Asp Thr  
 85 90 95  
 Pro Ser Met Tyr Cys Glu Ala Lys Leu Gly Ala His Thr Tyr Gln Ser  
 100 105 110  
 Val Lys Gln Gln Leu Phe Lys Ala Phe Gln Lys Ala Gly Leu Gly Thr  
 115 120 125  
 Trp Val Arg Lys Pro Pro Glu Gln Gln Gln Phe Leu Leu Thr Leu  
 130 135 140

<210> 3345  
 <211> 1149  
 <212> DNA  
 <213> Homo sapiens

<400> 3345  
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 60  
 tgggaggcag ggagcttggg cccctcagat gggccacgtg ccctcgtggg accctcattg  
 120  
 tcaccgtgag ctctttccaa ggggacgcca ccagtggggg cctgggcagg aggcagctga  
 180  
 ggtgtttcag gaaaaggctg aagatcaagg ctgtggtgtg aggactaccc actttaggga  
 240  
 agtgaaagag gccagcctca cccagacac ccagtgtgg ttggggaaag ggggtggtcc  
 300  
 gtggtgagcc tggtagctgg ggactcatcc tggccctgcc tggccctcag gtgggatgct  
 360  
 atggaatatg atgagaagct ggcccgtttc cggcaggccc acctcaaccc cttcaacaag  
 420  
 cagtctgggc cgagacagca tgagcagggc cctggggagg aggtcccgga cgtcactcct  
 480  
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 540  
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 600  
 gacgtccagc agctgcggca ggcgatcgag gaggcaagc aggtgattct ggagctgccc  
 660



gagcagtcgg agaagcagaa ggatgccgtg gtgcgactca tccacctccg gctgaagctc  
 720  
 caggagctga aggaccccaa tgaggatgag ccaaacatcc gaggctcct tgagcaccgc  
 780  
 ttttacaagg agaagagcaa gagcgtcaag cagacctgtg acaagtgtaa caccatcatc  
 840  
 tgggggctca ttcagacctg gtacacctgc acagggtgtt attaccgctg tcacagtaag  
 900  
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 960  
 gaactgaaca tctgccctga gacagggctg gacagccagg attaccgctg tgccgagtgc  
 1020  
 cgggcgcccc tctctctgcg ggggtgtgcc agtgaggcca ggcagtgcga ctataccggc  
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 1140  
 tgctcgcga  
 1149

&lt;210&gt; 3346

&lt;211&gt; 263

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3346

Met	Glu	Tyr	Asp	Glu	Lys	Leu	Ala	Arg	Phe	Arg	Gln	Ala	His	Leu	Asn
1				5					10					15	
Pro	Phe	Asn	Lys	Gln	Ser	Gly	Pro	Arg	Gln	His	Glu	Gln	Gly	Pro	Gly
			20					25					30		
Glu	Glu	Val	Pro	Asp	Val	Thr	Pro	Glu	Glu	Ala	Leu	Pro	Glu	Leu	Pro
		35					40					45			
Pro	Gly	Glu	Pro	Glu	Phe	Arg	Cys	Pro	Glu	Arg	Val	Met	Asp	Leu	Gly
	50					55					60				
Leu	Ser	Glu	Asp	His	Phe	Ser	Arg	Pro	Val	Gly	Leu	Phe	Leu	Ala	Ser
65					70					75					80
Asp	Val	Gln	Gln	Leu	Arg	Gln	Ala	Ile	Glu	Glu	Cys	Lys	Gln	Val	Ile
				85					90					95	
Leu	Glu	Leu	Pro	Glu	Gln	Ser	Glu	Lys	Gln	Lys	Asp	Ala	Val	Val	Arg
			100					105					110		
Leu	Ile	His	Leu	Arg	Leu	Lys	Leu	Gln	Glu	Leu	Lys	Asp	Pro	Asn	Glu
		115					120					125			
Asp	Glu	Pro	Asn	Ile	Arg	Val	Leu	Leu	Glu	His	Arg	Phe	Tyr	Lys	Glu
	130					135					140				
Lys	Ser	Lys	Ser	Val	Lys	Gln	Thr	Cys	Asp	Lys	Cys	Asn	Thr	Ile	Ile
145					150					155					160
Trp	Gly	Leu	Ile	Gln	Thr	Trp	Tyr	Thr	Cys	Thr	Gly	Cys	Tyr	Tyr	Arg
				165					170					175	
Cys	His	Ser	Lys	Cys	Leu	Asn	Leu	Ile	Ser	Lys	Pro	Cys	Val	Ser	Ser
			180					185					190		
Lys	Val	Ser	His	Gln	Ala	Glu	Tyr	Glu	Leu	Asn	Ile	Cys	Pro	Glu	Thr
		195					200					205			
Gly	Leu	Asp	Ser	Gln	Asp	Tyr	Arg	Cys	Ala	Glu	Cys	Arg	Ala	Pro	Ile
	210					215					220				
Ser	Leu	Arg	Gly	Val	Pro	Ser	Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly

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<400> 3347
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120
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180
acgcctgcca tgtttgaccg ggccctcaag cccttcttgc agagctgcca cctccgaatg
240
ctgactgacc cagtggacca gtgtgtggcc taccatctgg gccgtgttgg agagagcctc
300
ccagagctgc agatagaaat cattgctgac tacgaggtag accccaaccg acgccccaa
360
atcctggccc agacagcagc ccatgtagct ggggctgctt actactacca acgacaagat
420
gtggaggctg acccatgggg gaaccagcgc atatcagggt tgtgcataca cccccgattt
480
gggggctggg ttgccatccg aggggtagtg ctgctgccag ggatagagggt gccagatctg
540
ccaccagaa aacctcatga ctgtgtacct acaagagctg accgtatcgc cctactcgaa
600
ggcttcaatt tccactggcg tgattggact taccgggatg ctgtgacacc ccaggagcgc
660
tactcagaag agcagaaggc ctacttctcc actccacctg cccaacgatt ggccctattg
720
ggcttggctc agccctcaga gaagcctagt tctccctccc cggaccttcc ctttaccaca
780
ccgccccca agaagcctgg gaatcccagc agagcccgga gctggctcag cccaggggtc
840
tcaccacctg catcccttgg cccttgattt tctcccatgt ggacctgat ttatggtggg
900
acttgctagg acttaattgg ctttggcaaa gcaaaagggt ttgagtacaa gattactatt
960
tttgataata tagtagagat cttccatgaa gataacaagg ctcaaggaag ttaggtttgg
1020
ccaagataaa ggccaggga cagaattcc catctgcctt caaatgagtt tttttttttt
1080
ttttttttta gacagagtct tactctgtca cctaggctgg agtgacagtgg cacagtctct
1140
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1200
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1260

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ctgtctcaaa agaaaaaaaa gtacctgcct caggtaggga ctgaataaac acgtgtaagg  
 1320  
 cactttggaa aaatacctgg catatatagt aagcagtatg ttggccatta cgaaaggccc  
 1380  
 tgggaattct gtactgctgc tcatgggtgt agtcggttct agaggggtgg gcaggtggga  
 1440  
 gtagctgagg aagacaagtg gctggaatgg tatcacatga tacacagaag tatectcagt  
 1500  
 tctgaatcta ccttggcctc aagggccag gagaataact tttcccagct gacagcctct  
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 1680  
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 1740  
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 1800  
 ccagccttgt cttcctcttt cctctgtcag ttcaaaaaga acagaaacct ccagctcttt  
 1860  
 tacatagcag gtaccaggca tttatcagaa gaggccaagc ttctgggtcc catgcagccc  
 1920  
 tttgaatagt gtgtctaaac aaaaataggt gtccaagtag tcacactgag actttaactg  
 1980  
 gtaaccacc ctgtggcgct agtcgcagtg ctctggccaa cactatagca gggcttattc  
 2040  
 ttctccctca tgtgtagtga aacaaaatgt aacaccttgg gttcattcag ttccattccc  
 2100  
 tatgtctacc tgtgtcaata taattccctg atttggaggc agctctcctc attttcccca  
 2160  
 aaacagggaag agcaaggagt aaattcctct taaaatcaaa agctaataat atgcttccta  
 2220  
 aaataaagac tcatcaaggt ctcaaaaaaa aaaaaaaaaa aaaaatt  
 2267  
 <210> 3348  
 <211> 288  
 <212> PRT  
 <213> Homo sapiens

<400> 3348  
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 Lys Ile Glu Asp Thr Leu Cys Pro Phe Gly Phe Glu Val Tyr Pro Phe  
 20 25 30  
 Gln Val Ala Trp Tyr Asn Glu Leu Leu Pro Pro Ala Phe His Leu Pro  
 35 40 45  
 Leu Pro Gly Pro Thr Leu Ala Phe Leu Val Leu Ser Thr Pro Ala Met  
 50 55 60  
 Phe Asp Arg Ala Leu Lys Pro Phe Leu Gln Ser Cys His Leu Arg Met  
 65 70 75 80  
 Leu Thr Asp Pro Val Asp Gln Cys Val Ala Tyr His Leu Gly Arg Val  
 85 90 95  
 Gly Glu Ser Leu Pro Glu Leu Gln Ile Glu Ile Ile Ala Asp Tyr Glu  
 100 105 110

Val His Pro Asn Arg Arg Pro Lys Ile Leu Ala Gln Thr Ala Ala His  
 115 120 125  
 Val Ala Gly Ala Ala Tyr Tyr Tyr Gln Arg Gln Asp Val Glu Ala Asp  
 130 135 140  
 Pro Trp Gly Asn Gln Arg Ile Ser Gly Val Cys Ile His Pro Arg Phe  
 145 150 155 160  
 Gly Gly Trp Phe Ala Ile Arg Gly Val Val Leu Leu Pro Gly Ile Glu  
 165 170 175  
 Val Pro Asp Leu Pro Pro Arg Lys Pro His Asp Cys Val Pro Thr Arg  
 180 185 190  
 Ala Asp Arg Ile Ala Leu Leu Glu Gly Phe Asn Phe His Trp Arg Asp  
 195 200 205  
 Trp Thr Tyr Arg Asp Ala Val Thr Pro Gln Glu Arg Tyr Ser Glu Glu  
 210 215 220  
 Gln Lys Ala Tyr Phe Ser Thr Pro Pro Ala Gln Arg Leu Ala Leu Leu  
 225 230 235 240  
 Gly Leu Ala Gln Pro Ser Glu Lys Pro Ser Ser Pro Ser Pro Asp Leu  
 245 250 255  
 Pro Phe Thr Thr Pro Ala Pro Lys Lys Pro Gly Asn Pro Ser Arg Ala  
 260 265 270  
 Arg Ser Trp Leu Ser Pro Arg Val Ser Pro Pro Ala Ser Pro Gly Pro  
 275 280 285

&lt;210&gt; 3349

&lt;211&gt; 1132

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3349

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 60  
 ccggaagccg cgcctgcacc ggcgacatcg cgtctataag ctggtggagg acacgaagca  
 120  
 tcggcccaaa gaaaacctgg agctcatcct gacgcagtcg gtggagagta aggccccggc  
 180  
 cgaggcgctt cctctcaggg tgatgttgga gtccgggggtg acctggtctc agtgaagaaa  
 240  
 tctttaggcc ggaatcgact ccttcctcag ggactggctg tatatgcac ccctgaaaac  
 300  
 aagaagctgt ttgaagagga gaaattgctg agacaagaag gaaaattaga gaagatccag  
 360  
 accaaggcag gtgaggcgac agtgaaattt ctaaaaagct gtcgcctgga ggtagggatg  
 420  
 aagaacaatg tcaaattggga gctgaaccct gaaatagttg cccgccactt ctttaagaat  
 480  
 cttggtgttg tggttgcccc acatacatta aagttaccag cagagcctat cacacggtgg  
 540  
 ggcgagtatt ggtgtgaggt gacggtaaatt gggcttgata ctgtgagagt gcctatgtct  
 600  
 gtcgtgaact ttgagaagcc caagacccaa agatataagt actggttagc ccagcaagct  
 660  
 gccaaaggcta tggccccccac cagccccccag atctaaatct actctccctc caaggcagca  
 720

aagcagaatc gggagcagtg gagcagaaat gtgcaagcac cctgatctca ctcccagctc  
780  
tgaccaaata cagaatttta gagaacatct gaagacatca gactgcactg cgtatacatg  
840  
ttgaattctt catttttgcc atctttaact gtcactcactg gggcagggaa gtcctgttcc  
900  
agaagtacca ggctgtagat ttgataagct agatgcagta gaccgaaacc atccaaaacc  
960  
tgtttagctt cttcctccat tggagtttat tgggacaaac aggagagcca gccattgtct  
1020  
ccagtacttg cctcattctc atcatccaaa ctgaacattt gtatcccaag cagaaataaa  
1080  
gagaatatgt tcttttttaa aaaaaaaaaa aaaaaaaaaa aaaaaaattg gc  
1132

<210> 3350

<211> 174

<212> PRT

<213> Homo sapiens

<400> 3350

Gly	Pro	Gly	Arg	Gly	Ala	Ser	Ser	Gln	Ala	Asp	Val	Gly	Val	Arg	Gly
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Asp	Leu	Val	Ser	Val	Lys	Lys	Ser	Leu	Gly	Arg	Asn	Arg	Leu	Leu	Pro
			20					25					30		
Gln	Gly	Leu	Ala	Val	Tyr	Ala	Ser	Pro	Glu	Asn	Lys	Lys	Leu	Phe	Glu
		35					40					45			
Glu	Glu	Lys	Leu	Leu	Arg	Gln	Glu	Gly	Lys	Leu	Glu	Lys	Ile	Gln	Thr
	50					55					60				
Lys	Ala	Gly	Glu	Ala	Thr	Val	Lys	Phe	Leu	Lys	Ser	Cys	Arg	Leu	Glu
65					70				75					80	
Val	Gly	Met	Lys	Asn	Asn	Val	Lys	Trp	Glu	Leu	Asn	Pro	Glu	Ile	Val
			85					90					95		
Ala	Arg	His	Phe	Phe	Lys	Asn	Leu	Gly	Val	Val	Val	Ala	Pro	His	Thr
			100					105					110		
Leu	Lys	Leu	Pro	Ala	Glu	Pro	Ile	Thr	Arg	Trp	Gly	Glu	Tyr	Trp	Cys
		115					120					125			
Glu	Val	Thr	Val	Asn	Gly	Leu	Asp	Thr	Val	Arg	Val	Pro	Met	Ser	Val
	130					135					140				
Val	Asn	Phe	Glu	Lys	Pro	Lys	Thr	Lys	Arg	Tyr	Lys	Tyr	Trp	Leu	Ala
145					150				155					160	
Gln	Gln	Ala	Ala	Lys	Ala	Met	Ala	Pro	Thr	Ser	Pro	Gln	Ile		
			165					170							

<210> 3351

<211> 1422

<212> DNA

<213> Homo sapiens

<400> 3351

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120

atgatgctct tagctccaat aattcatggg ggcaagcaca gtgaacgaca tcctgccctc  
180  
gctgctgcgc cgcgatgcgc tgagcgccgc caaggagggtg ttgtaccacc tggacatcta  
240  
cttcagcagc cagctgcaga gcgcgccgct gcccatcgtg gacaagggcc ccgtggagct  
300  
gctggaggag ttcgtgttcc aggtgcccga ggagcgagc gcgcagccca agagactgaa  
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420  
ggactctgtt cggcagatta ttttttcatc ccttttcagc cctcaaggga acaaagccga  
480  
tgacagccgg atgagcttgt tgggaaaact ggtctccatg gcggtggctg tgtgtcgaat  
540  
cccgtgttg gagtgtgctg cctcctggct tcagcggacg cccgtggttt actgtgtgag  
600  
gttagccaag gccctttag atgactactg ctgtttgggt ccgggatcca ttcagacgct  
660  
gaagcagata ttcagtcca gcccgagatt ctgctgccag ttcacacct ccgttaccgc  
720  
gctctatgac ctgtcatcag atgacctcat tccacctatg gacttgcttg aaatgattgt  
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960  
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1020  
ctcaaaaact cacctcagcg tcttgcaagt gctcatgacg ctgcagctgc acctgaccga  
1080  
gaagaatctg tatgggcgcc tggggctgat cctcttcgac cacatgggtcc cgctggtaga  
1140  
ggagatcaac aggttggcgg atgaactgaa cccctcaac gcctcccagg agattgagct  
1200  
ctcgtggac cggctggcgc aggtctgca ggtggccatg gcctcaggag ctctgctgtg  
1260  
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1320  
ggtgatctcg ggtcccgtgc agcagtcgcc tcacgccgcg cccccccg ggttctaccc  
1380  
ccacatccac acgccccgc tgggctacgg ggctgtcccc cc  
1422

&lt;210&gt; 3352

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3352

Met	Trp	Pro	Ser	Gln	Leu	Leu	Ile	Phe	Met	Met	Leu	Leu	Ala	Pro	Ile
1				5				10					15		
Ile	His	Gly	Gly	Lys	His	Ser	Glu	Arg	His	Pro	Ala	Leu	Ala	Ala	Ala

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                20                25                30
Pro Arg Cys Ala Glu Arg Arg Gln Gly Gly Val Val Pro Pro Gly His
      35                40                45
Leu Leu Gln Gln Pro Ala Ala Glu Arg Ala Ala Ala His Arg Gly Gln
      50                55                60
Gly Pro Arg Gly Ala Ala Gly Gly Val Arg Val Pro Gly Ala Gln Gly
65                70                75                80
Ala Gln Arg Ala Ala Gln Glu Thr Glu Phe Pro Ser Gly Ala Ser Thr
      85                90                95
Ser

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<210> 3353  
 <211> 420  
 <212> DNA  
 <213> Homo sapiens

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<400> 3353
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120
ggctccctac ctgacctcac caacctgcac tttccccac cactgcccac cccctggac
180
cctgaagaga cagcctaccc tagcctgagt gggggcaaca gtacctcaa tttgaccac
240
accatgactc acctgggcat cagcaggggc atgggcctgg gccaggcta tgatgcacca
300
gggcgtcccc ctggatacca gtaaactgtc cactgaccag cggttacccc cataccata
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420

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<210> 3354  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

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<400> 3354
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Gly Ile Asn Ile Phe Pro Ser Pro Asp Gln Pro Ala Asn Val Pro Val
      20      25      30
Leu Pro Pro Ala Met Asn Thr Gly Gly Ser Leu Pro Asp Leu Thr Asn
      35      40      45
Leu His Phe Pro Pro Pro Leu Pro Thr Pro Leu Asp Pro Glu Glu Thr
      50      55      60
Ala Tyr Pro Ser Leu Ser Gly Gly Asn Ser Thr Ser Asn Leu Thr His
65      70      75      80
Thr Met Thr His Leu Gly Ile Ser Arg Gly Met Gly Leu Gly Pro Gly
      85      90      95
Tyr Asp Ala Pro Gly Arg Pro Pro Gly Tyr Gln
      100      105

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<210> 3355  
<211> 474  
<212> DNA  
<213> Homo sapiens

<400> 3355  
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<210> 3356  
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<212> PRT  
<213> Homo sapiens

<400> 3356  
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Asp Arg Leu Asn Asn Gln Ala Arg Thr Ile Ala Phe Leu Leu Glu Gln  
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Ala Phe Arg Ile Lys Glu Asp Ile Ser Ala Cys Leu Gln Gly Thr His  
50 55 60  
Gly Phe Arg Lys Glu Glu Ser Leu Ala Arg Lys Leu Leu Glu Ser His  
65 70 75 80  
Ile Gln Thr Ile Thr Ser Ile Val Lys Lys Leu Ser Gln Asn Ile Glu  
85 90 95  
Ile Leu Glu Asp Gln Ile Arg Ala Arg Asp Gln Ala Ala Thr Gly Thr  
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Arg Ser Phe  
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<210> 3357  
<211> 2268  
<212> DNA  
<213> Homo sapiens

<400> 3357



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1620

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<210> 3358

<211> 493

<212> PRT

<213> Homo sapiens

<400> 3358

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			20					25					30		
Ser	Tyr	Leu	Ser	Met	Glu	Lys	Ile	Ile	Gln	Val	Ala	Lys	Thr	Ser	Ala
		35				40						45			
Ala	Gln	Ala	Ile	His	Pro	Gly	Cys	Gly	Phe	Leu	Ser	Glu	Asn	Met	Glu
	50					55				60					
Phe	Ala	Glu	Leu	Cys	Lys	Gln	Glu	Gly	Ile	Ile	Phe	Ile	Gly	Pro	Pro
65				70						75				80	
Pro	Ser	Ala	Ile	Arg	Asp	Met	Gly	Ile	Lys	Ser	Thr	Ser	Lys	Ser	Ile
				85				90					95		
Met	Ala	Ala	Ala	Gly	Val	Pro	Val	Val	Glu	Gly	Tyr	His	Gly	Glu	Asp
		100						105					110		
Gln	Ser	Asp	Gln	Cys	Leu	Lys	Glu	His	Ala	Arg	Arg	Ile	Gly	Tyr	Pro
	115					120						125			
Val	Met	Ile	Lys	Ala	Val	Arg	Gly	Gly	Gly	Gly	Lys	Gly	Met	Arg	Ile
	130					135					140				
Val	Arg	Ser	Glu	Gln	Glu	Phe	Gln	Glu	Gln	Leu	Glu	Ser	Ala	Arg	Arg
145				150				155						160	
Glu	Ala	Lys	Lys	Ser	Phe	Asn	Asp	Asp	Ala	Met	Leu	Ile	Glu	Lys	Phe
			165					170					175		
Val	Asp	Thr	Pro	Arg	His	Val	Glu	Val	Gln	Val	Phe	Gly	Asp	His	His
		180				185							190		
Gly	Asn	Ala	Val	Tyr	Leu	Phe	Glu	Arg	Asp	Cys	Ser	Val	Gln	Arg	Arg

	195		200		205										
His	Gln	Lys	Ile	Ile	Glu	Glu	Ala	Pro	Ala	Pro	Gly	Ile	Lys	Ser	Glu
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Val	Arg	Lys	Lys	Leu	Gly	Glu	Ala	Ala	Val	Arg	Ala	Ala	Lys	Ala	Val
225					230					235					240
Asn	Tyr	Val	Gly	Ala	Gly	Thr	Val	Glu	Phe	Ile	Met	Asp	Ser	Lys	His
			245						250					255	
Asn	Phe	Cys	Phe	Met	Glu	Met	Asn	Thr	Arg	Leu	Gln	Val	Glu	His	Pro
			260					265					270		
Val	Thr	Glu	Met	Ile	Thr	Gly	Thr	Asp	Leu	Val	Glu	Trp	Gln	Leu	Arg
	275						280					285			
Ile	Ala	Ala	Gly	Glu	Lys	Ile	Pro	Leu	Ser	Gln	Glu	Glu	Ile	Thr	Leu
	290					295					300				
Gln	Gly	His	Ala	Phe	Glu	Ala	Arg	Ile	Tyr	Ala	Glu	Asp	Pro	Ser	Asn
305					310					315					320
Asn	Phe	Met	Pro	Val	Ala	Gly	Pro	Leu	Val	His	Leu	Ser	Thr	Pro	Arg
			325					330						335	
Ala	Asp	Pro	Ser	Thr	Arg	Ile	Glu	Thr	Gly	Val	Arg	Gln	Gly	Asp	Glu
			340					345					350		
Val	Ser	Val	His	Tyr	Asp	Pro	Met	Ile	Ala	Lys	Leu	Val	Val	Trp	Ala
	355						360					365			
Ala	Asp	Arg	Gln	Ala	Ala	Leu	Thr	Lys	Leu	Arg	Tyr	Ser	Leu	Arg	Gln
	370					375					380				
Tyr	Asn	Ile	Val	Gly	Leu	His	Thr	Asn	Ile	Asp	Phe	Leu	Leu	Asn	Leu
385					390				395						400
Ser	Gly	His	Pro	Glu	Phe	Glu	Ala	Gly	Asn	Val	His	Thr	Asp	Phe	Ile
			405					410						415	
Pro	Gln	His	His	Lys	Gln	Leu	Leu	Leu	Ser	Arg	Lys	Ala	Ala	Ala	Lys
			420					425					430		
Glu	Ser	Leu	Cys	Gln	Ala	Ala	Leu	Gly	Leu	Ile	Leu	Lys	Glu	Lys	Ala
	435						440					445			
Met	Thr	Asp	Thr	Phe	Thr	Leu	Gln	Ala	His	Asp	Gln	Phe	Ser	Pro	Phe
	450					455				460					
Ser	Ser	Ser	Ser	Gly	Arg	Arg	Leu	Asn	Ile	Ser	Tyr	Thr	Arg	Asn	Met
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Thr	Leu	Lys	Asp	Gly	Lys	Asn	Ser	Phe	Arg	Leu	Leu	Gly			
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&lt;210&gt; 3359

&lt;211&gt; 652

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3359

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120

ggctagacag ttactgtctc agctctagga tgtgcgttct tccactagaa gctcttctga  
180

gggaggtaat taaaaaacag tggaatggaa aaacagtgc gtagtcatcc tgtaatatgc  
240

tccttgtaaa caatgtatac attcctgcta ggtgccatat tcattgcttt aagctcaagt  
300

cgcaccttac tagtgaagta ttctgccaat gaagaaaaca agtatgatta tcttccaact  
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 420  
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 480  
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 540  
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<210> 3360

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3360

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			20					25					30		
Arg	Ile	Leu	Leu	Val	Lys	Tyr	Ser	Ala	Asn	Glu	Glu	Asn	Lys	Tyr	Asp
		35					40					45			
Tyr	Leu	Pro	Thr	Thr	Val	Asn	Val	Cys	Ser	Glu	Leu	Val	Lys	Leu	Val
	50					55					60				
Phe	Cys	Val	Leu	Val	Ser	Phe	Cys	Val	Ile	Lys	Lys	Asp	His	Gln	Ser
65					70					75				80	
Arg	Asn	Leu	Lys	Tyr	Ala	Ser	Trp	Lys	Glu	Phe	Ser	Asp	Phe	Met	Lys
			85					90						95	
Trp	Ser	Ile	Pro	Ala	Phe	Leu	Tyr	Phe	Leu	Asp	Asn	Leu	Ile	Val	Phe
			100					105						110	
Tyr	Val	Leu	Ser	Tyr	Leu	Gln	Pro	Ala	Met	Ala	Val	Ile	Phe	Ser	Asn
		115				120						125			
Phe	Ser	Ile	Ile	Thr	Thr	Ala	Leu	Leu	Phe	Arg	Ile	Val	Leu	Lys	Arg
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<210> 3361

<211> 1040

<212> DNA

<213> Homo sapiens

<400> 3361

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 420  
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 480  
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 600  
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 660  
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 720  
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 780  
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 840  
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 1020  
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 1040

&lt;210&gt; 3362

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3362

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Pro	Ser	Gln	His	His	Phe	Ser	Gly	Glu	Arg	Cys	Asn	Thr	Pro	Ala	Arg
			20					25					30		
Asn	Arg	Arg	Ser	Pro	Pro	Val	Arg	Arg	Gln	Arg	Gly	Arg	Arg	Asp	Arg
			35				40					45			
Leu	Ser	Arg	His	Asn	Ser	Ile	Ser	Gln	Asp	Glu	Asn	Tyr	His	His	Leu
	50					55					60				
Pro	Tyr	Ala	Gln	Gln	Gln	Ala	Ile	Glu	Glu	Pro	Arg	Ala	Phe	His	Pro
65					70					75					80
Pro	Asn	Val	Ser	Pro	Arg	Leu	Leu	His	Pro	Ala	Ala	His	Pro	Pro	Gln
				85					90					95	
Gln	Asn	Ala	Val	Met	Val	Asp	Ile	His	Asp	Gln	Leu	His	Gln	Gly	Thr
			100					105					110		
Val	Pro	Val	Ser	Tyr	Thr	Val	Thr	Thr	Val	Ala	Pro	His	Gly	Ile	Pro
		115					120					125			
Leu	Cys	Thr	Gly	Gln	His	Ile	Pro	Ala	Cys	Ser	Thr	Gln	Gln	Val	Pro
	130					135						140			
Gly	Cys	Ser	Val	Val	Phe	Ser	Gly	Gln	His	Leu	Pro	Val	Cys	Ser	Val

145		150		155		160									
Pro	Pro	Pro	Met	Leu	Gln	Ala	Cys	Ser	Val	Gln	His	Leu	Pro	Val	Pro
		165						170						175	
Tyr	Ala	Ala	Phe	Pro	Pro	Leu	Ile	Ser	Ser	Asp	Pro	Phe	Leu	Ile	His
		180						185					190		
Pro	Pro	His	Leu	Ser	Pro	His	His	Pro	Pro	His	Leu	Pro	Pro	Pro	Gly
		195						200					205		
Gln	Phe	Val	Pro	Phe	Gln	Thr	Gln	Gln	Ser	Arg	Ser	Pro	Leu	Gln	Arg
	210					215					220				
Ile	Glu	Asn	Glu	Val	Glu	Leu	Leu	Gly	Glu	His	Leu	Pro	Gly	Ala	His
225						230					235				240
Pro	Gln	His	Pro	His	Leu	Leu	Ile	Asn	Ile	Ser	Thr				
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<210> 3363  
 <211> 718  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 180  
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 240  
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 300  
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 420  
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 600  
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 660  
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 718

<210> 3364  
 <211> 163  
 <212> PRT  
 <213> Homo sapiens

<400> 3364  
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 Ala Leu Gln Ala Thr His Pro Pro Ala Ala His Gly Gly Pro Gly Thr

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Pro	Gly	Leu	Leu	Met	Glu	Ser	Tyr	Ala	Pro	Ser	Pro	Arg	Leu	Gly	Cys
	35		40		45										
Thr	Phe	Thr	Asp	Cys	Gln	Lys	Phe	Leu	Ile	Leu	Leu	Trp	Gly	Pro	Gly
	50		55		60										
Lys	Glu	Ser	Pro	Thr	Val	Trp	Ser	Cys	Pro	Leu	Asp	Ser	Thr	His	His
65			70		75									80	
Ser	Gly	Ser	Asn	Cys	Thr	Ser	Leu	Gly	Ser	Ser	Ala	Gly	Cys	Ile	Gly
			85		90									95	
Ser	Gly	Leu	Phe	Arg	Cys	Cys	Cys	Gly	Arg	Thr	Asp	Ser	Pro	Arg	Ala
		100						105					110		
Gly	Gly	Arg	Gly	Gly	Arg	Trp	Gly	Ala	Ser	Pro	Val	Gly	Ser	Gly	Asp
	115						120					125			
Thr	Pro	Glu	Leu	Leu	Gly	Arg	Gln	Cys	His	Pro	Lys	Asn	His	Gly	His
	130					135					140				
Asp	Gly	Val	Pro	Asp	His	Ala	Gly	Gln	Pro	Ile	Pro	His	His	Gln	Arg
145					150					155				160	
Ser	Trp	Ala													

&lt;210&gt; 3365

&lt;211&gt; 2389

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3365

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120  
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240  
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480  
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600  
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660  
cgatttgata ttagtgtaaa tgatagtgtt tggatctctc gtgctcagga tccagatcat  
720  
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780  
tccagcttgc gtcgacatgg ctcaatgggtg tccctgggtg ctggagcaag tggctactct  
840

gcaacatcca cctcttcatt caagaaaggc cacagtttac gtgagaagtt ggctgaaatg  
900  
gaaacattta gagacatctt atgtagacaa gttgacacgc tacagaagta ctttgatgcc  
960  
tgtgctgatg ctgtctctaa ggatgaactt caaagggata aagtggtaga agatgatgaa  
1020  
gatgactttc ctacaacgcg ttctgatggg gacttcttgc atagtaccaa cggcaataaa  
1080  
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1140  
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2389

&lt;210&gt; 3366



&lt;211&gt; 624

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3366

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Met Ser Asp Asn Gln Asn Trp Asn Ser Ser Gly Ser Glu Glu Asp Pro
 1           5           10           15
Glu Thr Glu Ser Gly Pro Pro Val Glu Arg Cys Gly Val Leu Ser Lys
           20           25           30
Trp Thr Asn Tyr Ile His Gly Trp Gln Asp Arg Trp Val Val Leu Lys
           35           40           45
Asn Asn Ala Leu Ser Tyr Tyr Lys Ser Glu Asp Glu Thr Glu Tyr Gly
           50           55           60
Cys Arg Gly Ser Ile Cys Leu Ser Lys Ala Val Ile Thr Pro His Asp
65           70           75           80
Phe Asp Glu Cys Arg Phe Asp Ile Ser Val Asn Asp Ser Val Trp Tyr
           85           90           95
Leu Arg Ala Gln Asp Pro Asp His Arg Gln Gln Trp Ile Asp Ala Ile
           100          105          110
Glu Gln His Lys Thr Glu Ser Gly Tyr Gly Ser Glu Ser Ser Leu Arg
           115          120          125
Arg His Gly Ser Met Val Ser Leu Val Ser Gly Ala Ser Gly Tyr Ser
           130          135          140
Ala Thr Ser Thr Ser Ser Phe Lys Lys Gly His Ser Leu Arg Glu Lys
145          150          155          160
Leu Ala Glu Met Glu Thr Phe Arg Asp Ile Leu Cys Arg Gln Val Asp
           165          170          175
Thr Leu Gln Lys Tyr Phe Asp Ala Cys Ala Asp Ala Val Ser Lys Asp
           180          185          190
Glu Leu Gln Arg Asp Lys Val Val Glu Asp Asp Glu Asp Asp Phe Pro
           195          200          205
Thr Thr Arg Ser Asp Gly Asp Phe Leu His Ser Thr Asn Gly Asn Lys
           210          215          220
Glu Lys Leu Phe Pro His Val Thr Pro Lys Gly Ile Asn Gly Ile Asp
225          230          235          240
Phe Lys Gly Glu Ala Ile Thr Phe Lys Ala Thr Thr Ala Gly Ile Leu
           245          250          255
Ala Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Asp Ser
           260          265          270
Trp Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu
           275          280          285
Glu Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe
           290          295          300
Gly Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu
305          310          315          320
Glu Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile
           325          330          335
Glu Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser
           340          345          350
Leu Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val
           355          360          365
Gln Lys Pro Tyr Ser Arg Ser Ser Ser Met Ser Ser Ile Asp Leu Val
           370          375          380
Ser Ala Ser Asp Asp Val His Arg Phe Ser Ser Gln Val Glu Glu Met

```

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385          390          395          400
Val Gln Asn His Met Thr Tyr Ser Leu Gln Asp Val Gly Gly Asp Ala
          405          410          415
Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met Lys Val Tyr Arg Arg
          420          425          430
Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro Leu Lys Ala Thr His
          435          440          445
Ala Val Lys Gly Val Thr Gly His Glu Val Cys Asn Tyr Phe Trp Asn
          450          455          460
Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile Glu Asn Phe His Val
465          470          475          480
Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Ile Tyr Gln Thr His Lys
          485          490          495
Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu Tyr Leu Ser Val Ile
          500          505          510
Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro Glu Thr Trp Ile Val
          515          520          525
Cys Asn Phe Ser Val Asp His Asp Ser Ala Pro Leu Asn Asn Arg Cys
          530          535          540
Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys Gln Thr Leu Val Ser
545          550          555          560
Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp Asn Ile Leu Cys Lys
          565          570          575
Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly Trp Ala Pro Ala Ser
          580          585          590
Val Leu Arg Ala Val Ala Lys Arg Glu Tyr Pro Lys Phe Leu Lys Arg
          595          600          605
Phe Thr Ser Tyr Val Gln Glu Lys Thr Ala Gly Lys Pro Ile Leu Phe
          610          615          620

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<210> 3367  
 <211> 366  
 <212> DNA  
 <213> Homo sapiens

<400> 3367  
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 120  
 tgccttcccc acttcaggcc tcttagtgtc aaggatgtga gaggcaaggg ctgctgggag  
 180  
 agtatatttac ggactgaagg aggcgtgccg cctgccctgc cctcctactg gtggaggaag  
 240  
 gaggtgctgg gagccccaca actcagggcc ccccgacgcc cagtaaggcc actgtacacc  
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 cctcctgacc cagaccataa ccagcctccg attgtgcttt tgaccctgtt tccttcaggc  
 360  
 accagg  
 366

<210> 3368  
 <211> 104  
 <212> PRT

<213> Homo sapiens

<400> 3368

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Met Thr Glu Asn Tyr Ala Thr Glu Val Leu Glu Ala Gly Ile Val Ala
 1             5             10             15
Ser Gln Glu His Gly Gly Cys Leu Pro His Phe Arg Pro Leu Ser Val
             20             25             30
Lys Asp Val Arg Gly Lys Gly Cys Trp Glu Ser Ile Leu Arg Thr Glu
             35             40             45
Gly Gly Val Pro Pro Ala Leu Pro Ser Tyr Trp Trp Arg Lys Glu Val
             50             55             60
Leu Gly Ala Pro Gln Leu Arg Ala Pro Arg Arg Pro Val Arg Pro Leu
65             70             75             80
Tyr Thr Pro Pro Asp Pro Asp His Asn Gln Pro Pro Ile Val Leu Leu
             85             90             95
Thr Leu Phe Pro Ser Gly Thr Arg
             100

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<210> 3369

<211> 1405

<212> DNA

<213> Homo sapiens

<400> 3369

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gataaggagc agaaaaatca ggaaaactgt ggtgcaaaga agaataaaaa gaagaggaaa
120
aaggttttat ataatgccaa taaaaatgat gattatgaca acgaggagat cttaacctat
180
gaggaaatgt cactttatca tcagccagca aataggaaga gacctatcat cttgattggt
240
ccacagaact gtggccagaa tgaattgcgt cagaggctca tgaacaaaga aaaggaccgc
300
tttgcactctg cagttcctca tacaaccgg agtaggcgag accaagaagt agccggtaga
360
gattaccact ttgtttcgcg gcaagcattc gaggcagaca tagcagctgg aaagttcatt
420
gagcatgggtg aatttgagaa gaatttgtat ggaactagca tagattctgt acggcaagtg
480
atcaactctg gcaaaatatg tcttttaagt cttcgtacac agtcattgaa gactctccgg
540
aattcagatt tgaaaccata tattatcttc attgcacccc cttcacaaga aagacttcgg
600
gcattattgg ccaaagaagg caagaatcca aagcctgaag agttgagaga aatcattgag
660
aagacaagag agatggagca gaacaatggc cactactttg atacggcaat tgtgaattcc
720
gatcttgata aagcctatca ggaattgctt aggttaatta acaaacttga tactgaacct
780
cagtgggtac catccacttg gctgaggtga aagaaacatc cattctgtgg catgttggac
840
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900

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 1080  
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 1260  
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 1380  
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 1405

<210> 3370

<211> 269

<212> PRT

<213> Homo sapiens

<400> 3370

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			20					25					30		
Lys	Lys	Asn	Lys	Lys	Lys	Arg	Lys	Lys	Val	Leu	Tyr	Asn	Ala	Asn	Lys
		35					40					45			
Asn	Asp	Asp	Tyr	Asp	Asn	Glu	Glu	Ile	Leu	Thr	Tyr	Glu	Glu	Met	Ser
	50					55					60				
Leu	Tyr	His	Gln	Pro	Ala	Asn	Arg	Lys	Arg	Pro	Ile	Ile	Leu	Ile	Gly
65					70				75						80
Pro	Gln	Asn	Cys	Gly	Gln	Asn	Glu	Leu	Arg	Gln	Arg	Leu	Met	Asn	Lys
			85						90					95	
Glu	Lys	Asp	Arg	Phe	Ala	Ser	Ala	Val	Pro	His	Thr	Thr	Arg	Ser	Arg
			100					105					110		
Arg	Asp	Gln	Glu	Val	Ala	Gly	Arg	Asp	Tyr	His	Phe	Val	Ser	Arg	Gln
		115					120					125			
Ala	Phe	Glu	Ala	Asp	Ile	Ala	Ala	Gly	Lys	Phe	Ile	Glu	His	Gly	Glu
	130					135					140				
Phe	Glu	Lys	Asn	Leu	Tyr	Gly	Thr	Ser	Ile	Asp	Ser	Val	Arg	Gln	Val
145				150					155						160
Ile	Asn	Ser	Gly	Lys	Ile	Cys	Leu	Leu	Ser	Leu	Arg	Thr	Gln	Ser	Leu
			165					170					175		
Lys	Thr	Leu	Arg	Asn	Ser	Asp	Leu	Lys	Pro	Tyr	Ile	Ile	Phe	Ile	Ala
		180						185					190		
Pro	Pro	Ser	Gln	Glu	Arg	Leu	Arg	Ala	Leu	Leu	Ala	Lys	Glu	Gly	Lys
		195					200					205			
Asn	Pro	Lys	Pro	Glu	Glu	Leu	Arg	Glu	Ile	Ile	Glu	Lys	Thr	Arg	Glu
	210					215					220				
Met	Glu	Gln	Asn	Asn	Gly	His	Tyr	Phe	Asp	Thr	Ala	Ile	Val	Asn	Ser

225		230		235		240									
Asp	Leu	Asp	Lys	Ala	Tyr	Gln	Glu	Leu	Leu	Arg	Leu	Ile	Asn	Lys	Leu
			245						250					255	
Asp	Thr	Glu	Pro	Gln	Trp	Val	Pro	Ser	Thr	Trp	Leu	Arg			
			260					265							

<210> 3371  
 <211> 790  
 <212> DNA  
 <213> Homo sapiens

<400> 3371  
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 120  
 ggtttcaaaa gtccggtggc ctggggctgt atgggtccac cccctggggg gggtgaggaa  
 180  
 gttgctgtcg tctgaggtac tgccgtacgt gtagtcctgg tccccgcttt tgccctggcc  
 240  
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 300  
 cgattccgac aagagacggg gcacccttca ttgcaaagag atttccccag atcctttctc  
 360  
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 420  
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 660  
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 ggctacgcgt  
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<210> 3372  
 <211> 198  
 <212> PRT  
 <213> Homo sapiens

<400> 3372  
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 Glu Ala Pro Arg Glu His Leu Asp His Gln Ala Ala His Gln Pro Phe  
 20 25 30  
 Pro Arg Pro Arg Phe Arg Gln Glu Thr Gly His Pro Ser Leu Gln Arg  
 35 40 45  
 Asp Phe Pro Arg Ser Phe Leu Leu Asp Leu Pro Asn Phe Pro Asp Leu

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      50              55              60
Ser Lys Ala Asp Ile Asn Gly Gln Asn Pro Asn Ile Gln Val Thr Ile
65              70              75              80
Glu Val Val Asp Gly Pro Asp Ser Glu Ala Asp Lys Asp Gln His Pro
      85              90              95
Glu Asn Lys Pro Ser Trp Ser Val Pro Ser Pro Asp Trp Arg Ala Trp
      100             105             110
Trp Gln Arg Ser Leu Ser Leu Ala Arg Ala Asn Ser Gly Asp Gln Asp
      115             120             125
Tyr Lys Tyr Asp Ser Thr Ser Asp Asp Ser Asn Phe Leu Asn Pro Pro
      130             135             140
Arg Gly Trp Asp His Thr Ala Pro Gly His Arg Thr Phe Glu Thr Lys
145             150             155             160
Asp Gln Pro Glu Tyr Asp Ser Thr Asp Gly Glu Gly Asp Trp Ser Leu
      165             170             175
Trp Ser Val Cys Ser Val Thr Cys Gly Asn Gly Asn Gln Lys Arg Thr
      180             185             190
Arg Ser Cys Gly Tyr Ala
      195

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&lt;210&gt; 3373

&lt;211&gt; 726

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3373

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120
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480
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600
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660
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atgcat
726

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&lt;210&gt; 3374

<211> 84  
 <212> PRT  
 <213> Homo sapiens

<400> 3374  
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 Phe His His Gln His Val Leu Ile Ser Arg Phe Leu Cys Leu Lys Asn  
                   20                  25                  30  
 Lys Ser Ser Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro  
                   35                  40                  45  
 Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile  
           50                  55                  60  
 Trp Phe Leu Leu Leu Ala Val Asp Gly Cys Val Leu Gly Ser Cys Arg  
  65                  70                  75                  80  
 Gly Arg Gly Leu

<210> 3375  
 <211> 393  
 <212> DNA  
 <213> Homo sapiens

<400> 3375  
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 120  
 agccacctgc ctgggctttg ggggcccagc cggcatgggg agccccaggc tccagctggc  
 180  
 ctgccttggc tctgaaatct aggccaggat gcagagcccc cagtgcggcc agtggagccc  
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 393

<210> 3376  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 3376  
 Met Phe Ala His Met Cys Pro Cys Arg Cys Met Leu Ser Arg Thr Cys  
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 Ala His Thr Leu Ser Thr His Thr Pro Ser Cys Arg Leu Ser Pro Thr  
                   20                  25                  30  
 Pro Glu Pro Pro Ala Trp Ala Leu Gly Ala Gln Pro Ala Trp Gly Ala  
                   35                  40                  45  
 Pro Gly Ser Ser Trp Pro Arg Leu Ala Leu Lys Ser Arg Pro Gly Cys  
           50                  55                  60  
 Arg Ala Arg Ser Ala Ala Ser Gly Ala Pro Gly Thr Val Arg Ser Pro

<400> 3377					
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120					
tgacaggaaa	tttcggggaa	ctaaaaaggc	tggaagaaca	tgaagatgga	gcagtcataa
180					
accacccact	caaggaccat	ctccttcacg	accatccaca	cgagactcag	attgtctgaa
240					
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300					
cttccaaaat	attacatcat	aaatcattga	gaagattaaa	aaaaaacact	tgaagaaatt
360					
gtagttttaa	acatctctgc	atatattttg	gatagctact	aggttacttt	aactgtcatt
420					
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480					
aaggttatat	ttcccagtta	gcgggtgaag	ggctggagac	cttattgcag	tcatggcttt
540					
cacaaattac	agcagtctga	atcgagctca	gctaaccctt	gaatatctgc	acacaaattc
600					
gtaagtatcc	tctaggtgcc	actgaggtaa	ccagtaactc	gttccttgat	attatatgga
660					
aatcgtttcc	ccagaaaatt	ttgctttttc	actttttgag	atgtatccca	ctggagtgaa
720					
atgtgtcact	ggatatcttg	agctctgtat	tgaagaactg	agatcagtga	aatacttggt
780					
gctaatccag	aagaatctga	tttttgttta	ttggatcaaa	attttctaaa	tgcaaacttt
840					
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900					
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960					
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1020					
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1080					
atcttcctgg	cagattgctc	acatccaata	ttatttgtat	atgctaaaca	ggaaacggca
1140					
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1200					
ttcatgggtc	ttgagttcat	gaaggagtaa	tctaatactc	ccaacatggt	ctggaatggt
1260					



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1320  
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1380  
aaggatgttt aggtctgtga agaaaagaat ttctaggccg ggtgctgtgg ctcacgctg  
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2040  
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&lt;210&gt; 3378

&lt;211&gt; 970

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3378

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Tyr	Ser	Pro	Phe	Arg	Thr	Glu	Glu	Glu	Val	Met	Thr	Gln	Phe	Met	Lys
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Ile	Phe	Ile	His	Gly	His	Lys	Val	Gln	Thr	Lys	Arg	Leu	Ser	Cys	Cys		
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&lt;210&gt; 3380

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3380

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Thr	Gly	Pro	Leu	Asp	Phe	Glu	Gln	Cys	Asp	Arg	Tyr	Gln	Leu	Gln	Leu
		100						105					110		
Leu	Ala	His	Asp	Gly	Pro	His	Glu	Gly	Arg	Ala	Xaa	Leu	Thr	Val	Leu
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Val	Glu	Asp	Val	Asn	Asp	Asn	Ala	Pro	Ala	Phe	Ser	Gln	Ser	Leu	Tyr

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Thr Leu Phe Thr Ile Val Gly Thr Leu Ala Leu Gly His Asp Gly Ser		190
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Gly Ala Val Asp Val Val Leu Glu Ala Arg Asp His Gly Ala Pro Val		205
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Arg Ala Ala Arg Ala Thr Val Asn Val Gln Leu Arg Asp Gln Asn Asp		220
225	230	235
His Ala Pro Ser Phe Thr Leu Phe His Tyr Arg Val Ala Val Thr Glu		240
	245	250
Asp Leu Pro Pro Gly Ser Thr Leu Leu Thr Leu Glu Ala Thr Asp Ala		255
	260	265
Asp Gly Ser Arg Ser His Ala Ala Val Asp Tyr Ser Ile Ile Ser Gly		270
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&lt;210&gt; 3381

&lt;211&gt; 1379

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3381

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&lt;210&gt; 3382

&lt;211&gt; 279

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3382

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Glu	Glu	Glu	Gln	Glu	Glu	Ser	Glu	Glu	Ala	Ala	Cys	Gly	Ser	Lys	Lys
			35					40						45	
Arg	Val	Val	Pro	Gly	Ile	Val	Tyr	Leu	Gly	His	Ile	Pro	Pro	Arg	Phe
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Arg	Pro	Leu	His	Val	Arg	Asn	Leu	Leu	Ser	Ala	Tyr	Gly	Glu	Val	Gly
						70				75					80
Arg	Val	Phe	Phe	Gln	Ala	Glu	Asp	Arg	Phe	Val	Arg	Arg	Lys	Lys	Lys
				85					90						95
Ala	Ala	Ala	Ala	Ala	Gly	Gly	Lys	Lys	Arg	Ser	Tyr	Thr	Lys	Asp	Tyr
				100				105						110	
Thr	Glu	Gly	Trp	Val	Glu	Phe	Arg	Asp	Lys	Arg	Ile	Ala	Lys	Arg	Val
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Ala	Ala	Ser	Leu	His	Asn	Thr	Pro	Met	Gly	Ala	Arg	Arg	Arg	Ser	Pro
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Phe	Arg	Tyr	Asp	Leu	Trp	Asn	Leu	Lys	Tyr	Leu	His	Arg	Phe	Thr	Trp
						150				155					160
Ser	His	Leu	Ser	Glu	His	Leu	Ala	Phe	Glu	Arg	Gln	Val	Arg	Arg	Gln
				165					170						175
Arg	Leu	Arg	Ala	Glu	Val	Ala	Gln	Ala	Lys	Arg	Glu	Thr	Asp	Phe	Tyr
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Leu	Gln	Ser	Val	Glu	Arg	Gly	Gln	Arg	Phe	Leu	Ala	Ala	Asp	Gly	Asp
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 <212> PRT  
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35 40 45
Asn Ala His Pro Trp Glu Leu Ser Cys Pro Arg Ser Pro Thr Gln Thr
50 55 60
Leu Gln His Glu Arg Ala Arg Leu Asn Leu Lys Lys Lys Lys Phe Arg
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Ala Pro Glu Gln Glu Leu Val Ser Ile Ile Asn Ser Glu Ser
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<400> 3385

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&lt;210&gt; 3386

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3386

Met	Val	Val	Lys	Thr	Val	Thr	Val	Arg	Gly	Trp	Gly	Ala	Leu	Arg	Ser
1				5					10					15	
Thr	Ser	Ser	Ala	Pro	His	Tyr	Pro	Gly	Ser	Phe	Arg	Val	Gly	Pro	Arg
			20					25					30		
Gln	Pro	Pro	Ala	Ser	Ala	Thr	Thr	Pro	Val	Pro	Leu	Ala	Arg	Phe	Phe
		35					40					45			
Val	Asn	Phe	Pro	Ser	Ala	Lys	Gln	Tyr	Phe	Ser	Gln	Phe	Lys	His	Met
	50					55					60				
Glu	Asp	Pro	Leu	Glu	Met	Glu	Arg	Ser	Pro	Gln	Leu	Arg	Lys	His	Ala
65				70					75					80	
Cys	Arg	Val	Met	Gly	Ala	Leu	Asn	Thr	Val	Val	Glu	Asn	Leu	His	Asp
			85					90					95		
Pro	Asp	Lys	Val	Ser	Ser	Val	Leu	Ala	Leu	Val	Gly	Lys	Ala	His	Ala
		100						105					110		
Leu	Lys	His	Lys	Val	Glu	Pro	Val	Tyr	Phe	Lys	Ile	Leu	Ser	Gly	Val
	115						120					125			
Ile	Leu	Glu	Val	Val	Ala	Glu	Glu	Phe	Ala	Ser	Asp	Phe	Pro	Pro	Glu
	130					135					140				
Thr	Gln	Arg	Ala	Trp	Ala	Lys	Leu	Arg	Gly	Leu	Ile	Tyr	Ser	His	Val
145				150					155					160	
Thr	Ala	Ala	Tyr	Lys	Glu	Val	Gly	Trp	Val	Gln	Gln	Val	Pro	Asn	Ala
			165					170					175		
Thr	Thr	Pro	Pro	Ala	Thr	Leu	Pro	Ser	Ser	Gly	Pro				

180

185

&lt;210&gt; 3387

&lt;211&gt; 3299

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3387

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300  
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420  
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<210> 3388

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3388

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Leu	Gly	Val	Trp	Thr	Gln	Arg	Arg	Arg	Glu	His	Glu	Arg	Pro	Ser	Ser
			20					25					30		
Leu	Arg	Val	Val	Leu	Ala	Leu	Arg	Gly	Arg	Glu	Glu	Val	Ser	Asp	Ala
		35					40					45			
Gly	Cys	Gly	Gly	Pro	Arg	Ile	Thr	Ile	Asn	Lys	Asp	Thr	Lys	Val	Pro
	50					55					60				
Asn	Ala	Cys	Leu	Phe	Thr	Ile	Asn	Lys	Glu	Asp	His	Thr	Leu	Gly	Asn
65					70					75				80	
Ile	Ile	Lys	Ser	Gln	Leu	Leu	Lys	Asp	Pro	Gln	Val	Leu	Phe	Ala	Gly
				85				90						95	
Tyr	Lys	Val	Pro	His	Pro	Leu	Glu	His	Lys	Ile	Ile	Ile	Arg	Val	Gln
			100					105						110	
Thr	Thr	Pro	Asp	Tyr	Ser	Pro	Gln	Glu	Ala	Phe	Thr	Asn	Ala	Ile	Thr
		115					120					125			
Asp	Leu	Ile	Ser	Glu	Leu	Ser	Leu	Leu	Glu	Glu	Arg	Phe	Arg	Val	Ala
	130					135					140				
Ile	Lys	Asp	Lys	Gln	Glu	Gly	Ile	Glu							
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<210> 3389

<211> 308

<212> DNA

<213> Homo sapiens

<400> 3389

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 180  
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 300

cggtcgac  
308

<210> 3390  
<211> 102  
<212> PRT  
<213> Homo sapiens

<400> 3390  
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20 25 30  
Thr Gln Lys His Pro Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro  
35 40 45  
Leu Leu Asn Phe Ile Trp Phe Leu Leu Leu Ala Val Asp Gly Glu Pro  
50 55 60  
Ser Asp Gln Pro His Gly Leu Leu Arg Ala Gly Gly Trp Gly Gly Glu  
65 70 75 80  
Pro Gln Arg Arg Gln Pro His Arg Ala Gly Leu Asn Trp Pro Gly His  
85 90 95  
Val Glu Thr Pro Arg Ser  
100

<210> 3391  
<211> 1295  
<212> DNA  
<213> Homo sapiens

<400> 3391  
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120  
tttgcagact tagaagatgg ctttaatttc caaggaacca ggcggcgata ctacagacat  
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240  
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420  
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480  
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660  
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720

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 1200  
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 1260  
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 1295

&lt;210&gt; 3392

&lt;211&gt; 355

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3392

Ile	Val	Phe	Leu	Leu	Tyr	Leu	Glu	Thr	Cys	Leu	Glu	Val	Met	Asp	Asp
1				5					10					15	
Lys	Pro	Asn	Pro	Glu	Ala	Leu	Ser	Asp	Ser	Ser	Glu	Arg	Leu	Phe	Ser
			20					25					30		
Phe	Gly	Val	Ile	Ala	Asp	Val	Gln	Phe	Ala	Asp	Leu	Glu	Asp	Gly	Phe
	35						40					45			
Asn	Phe	Gln	Gly	Thr	Arg	Arg	Arg	Tyr	Tyr	Arg	His	Ser	Leu	Leu	His
	50					55					60				
Leu	Gln	Gly	Ala	Ile	Glu	Asp	Trp	Asn	Asn	Glu	Ser	Ser	Met	Pro	Cys
65					70					75				80	
Cys	Val	Leu	Gln	Leu	Gly	Asp	Ile	Ile	Asp	Gly	Tyr	Asn	Ala	Gln	Tyr
			85						90					95	
Asn	Ala	Ser	Lys	Lys	Ser	Leu	Glu	Leu	Val	Met	Asp	Met	Phe	Lys	Arg
			100					105					110		
Leu	Lys	Val	Pro	Val	His	His	Thr	Trp	Gly	Asn	His	Glu	Phe	Tyr	Asn
		115					120					125			
Phe	Ser	Arg	Glu	Tyr	Leu	Thr	His	Ser	Lys	Leu	Asn	Thr	Lys	Phe	Leu
	130					135					140				
Glu	Asp	Gln	Ile	Val	His	His	Pro	Glu	Thr	Met	Pro	Ser	Glu	Asp	Tyr
145					150					155				160	
Tyr	Ala	Tyr	His	Phe	Val	Pro	Phe	Pro	Lys	Phe	Arg	Phe	Ile	Leu	Leu
			165						170				175		
Asp	Ala	Tyr	Asp	Leu	Ser	Val	Leu	Gly	Val	Asp	Gln	Ser	Ser	Pro	Lys
			180					185				190			
Tyr	Glu	Gln	Cys	Met	Lys	Ile	Leu	Arg	Glu	His	Asn	Pro	Asn	Thr	Glu
	195						200					205			
Leu	Asn	Ser	Pro	Gln	Gly	Leu	Ser	Glu	Pro	Gln	Phe	Val	Gln	Phe	Asn

210	215	220
Gly Gly Phe Ser Gln Glu Gln Leu Asn Trp Leu Asn Glu Val Leu Thr		
225	230	235
Phe Ser Asp Thr Asn Gln Glu Lys Val Val Ile Val Ser His Leu Pro		240
	245	250
Ile Tyr Pro Asp Ala Ser Asp Asn Val Cys Leu Ala Trp Asn Tyr Arg		255
	260	265
Asp Ala Leu Ala Val Ile Trp Ser His Glu Cys Val Val Cys Phe Phe		270
	275	280
Ala Gly His Thr His Asp Gly Gly Tyr Ser Glu Asp Pro Phe Gly Val		285
	290	295
Tyr His Val Asn Leu Glu Gly Val Ile Glu Thr Ala Pro Asp Ser Gln		300
305	310	315
Ala Phe Gly Thr Val His Val Tyr Pro Asp Lys Met Met Leu Lys Gly		320
	325	330
Arg Gly Arg Val Pro Asp Arg Ile Met Asn Tyr Lys Lys Glu Arg Ala		335
	340	345
Phe His Cys		350
355		

&lt;210&gt; 3393

&lt;211&gt; 510

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3393

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510

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&lt;210&gt; 3394

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3394

Xaa Arg Leu Trp Asp Pro Leu Gly Arg Gly Ser Ser Gly Gly Asp Val
1 5 10 15
Cys Arg Leu Gly Met Gly Pro Gly Xaa Val Thr Pro Ser Ser Phe Val



			20					25					30				
Gly	Val	Trp	Ala	Gly	Ala	Thr	Ala	Ser	Arg	Gly	Gly	Ser	Asn	Phe	Glu		
			35					40					45				
Tyr	Leu	Lys	Arg	Glu	His	Ser	Leu	Ser	Lys	Pro	Tyr	Gln	Gly	Val	Gly		
		50				55					60						
Thr	Gly	Ser	Ser	Ser	Leu	Trp	Asn	Leu	Met	Gly	Asn	Xaa	Met	Val	Met		
65					70					75				80			
Thr	Gln	Tyr	Ile	Arg	Leu	Thr	Pro	Asp	Met	Gln	Ser	Lys	Gln	Gly	Ala		
			85					90					95				
Leu	Trp	Asn	Arg	Val	Pro	Cys	Phe	Leu	Arg	Asp	Trp	Glu	Leu	Gln	Val		
			100					105					110				
His	Phe	Lys	Ile	His	Gly	Gln	Gly	Lys	Lys	Asn	Leu	His	Gly	Asp	Gly		
		115					120					125					
Leu	Ala	Ile	Trp	Tyr	Thr	Lys	Asp	Arg	Met	Gln	Pro	Gly	Pro	Val	Phe		
		130				135					140						
Gly	Asn	Met	Asp	Lys	Phe	Val	Gly	Leu	Gly	Val	Phe	Val	Asp	Thr	Tyr		
145				150					155					160			
Pro	Asn	Glu	Glu	Lys	Gln	Pro	Phe	Thr	Arg								
			165					170									

&lt;210&gt; 3395

&lt;211&gt; 807

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3395

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780
aatacatcat ccacaaacca ccaattg
807

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 <211> 205  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Glu Tyr Gln Ser Thr Ser Ala Ser Ala Ser Ala Ser Pro Phe Gln Ser  
 50 55 60  
 Ala Trp Tyr Ser Glu Ser Glu Ile Thr Gln Gly Ala Arg Ser Arg Ser  
 65 70 75 80  
 Gln Asn Gln Gln Arg Asp His Asp Ser Lys Arg Pro Lys Leu Ser Cys  
 85 90 95  
 Thr Asn Cys Thr Thr Ser Ala Gly Arg Asn Val Gly Asn Gly Leu Asn  
 100 105 110  
 Thr Leu Ser Asp Ser Ser Trp Arg His Ser Gln Val Pro Arg Ser Ser  
 115 120 125  
 Ser Met Val Leu Gly Ser Phe Gly Thr Asp Leu Met Arg Glu Arg Arg  
 130 135 140  
 Asp Leu Glu Arg Arg Thr Asp Ser Ser Ile Ser Asn Leu Met Asp Tyr  
 145 150 155 160  
 Ser His Arg Ser Gly Asp Phe Thr Thr Ser Ser Tyr Val Gln Asp Arg  
 165 170 175  
 Val Pro Ser Tyr Ser Gln Gly Ala Arg Pro Lys Glu Asn Ser Met Ser  
 180 185 190  
 Thr Leu Gln Leu Asn Thr Ser Ser Thr Asn His Gln Leu  
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<210> 3397  
 <211> 492  
 <212> DNA  
 <213> Homo sapiens

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 180  
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&lt;210&gt; 3400

&lt;211&gt; 1069

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3400

Thr	Gln	Ala	Met	Glu	Gly	Leu	Leu	His	Tyr	Ile	Asn	Pro	Ala	His	Ala	1	5	10	15
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Cys	Asp	Val	Leu	Leu	Ile	Val	Gly	Asp	Gln	Lys	Phe	Arg	Ala	His	Lys	35	40	45	
Asn	Val	Leu	Ala	Ala	Ser	Ser	Glu	Tyr	Phe	Gln	Ser	Leu	Phe	Thr	Asn	50	55	60	
Lys	Glu	Asn	Glu	Ser	Gln	Thr	Val	Phe	Gln	Leu	Asp	Phe	Cys	Glu	Pro	65	70	75	80
Asp	Ala	Phe	Asp	Asn	Val	Leu	Asn	Tyr	Ile	Tyr	Ser	Ser	Ser	Leu	Phe	85	90	95	
Val	Glu	Lys	Ser	Ser	Leu	Ala	Ala	Val	Gln	Glu	Leu	Gly	Tyr	Ser	Leu	100	105	110	
Gly	Ile	Ser	Phe	Leu	Thr	Asn	Ile	Val	Ser	Lys	Thr	Pro	Gln	Ala	Pro	115	120	125	
Phe	Pro	Thr	Cys	Pro	Asn	Arg	Lys	Lys	Val	Phe	Val	Glu	Asp	Asp	Glu	130	135	140	
Asn	Ser	Ser	Gln	Lys	Arg	Ser	Val	Ile	Val	Cys	Gln	Ser	Arg	Asn	Glu	145	150	155	160
Ala	Gln	Gly	Lys	Thr	Val	Ser	Gln	Asn	Gln	Pro	Asp	Val	Ser	His	Thr	165	170	175	
Ser	Arg	Pro	Ser	Pro	Ser	Ile	Ala	Val	Lys	Ala	Asn	Thr	Asn	Lys	Pro	180	185	190	
His	Val	Pro	Lys	Pro	Ile	Glu	Pro	Leu	His	Asn	Leu	Ser	Leu	Thr	Glu	195	200	205	
Lys	Ser	Trp	Pro	Lys	Asp	Ser	Ser	Val	Val	Tyr	Ala	Lys	Ser	Leu	Glu	210	215	220	
His	Ser	Gly	Ser	Leu	Asp	Asp	Pro	Asn	Arg	Ile	Ser	Leu	Val	Lys	Arg				



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245 250 255  
Asp Lys Pro Gly Val Ser Gly Gln Leu Pro Lys Gly Lys Ala Leu Glu  
260 265 270  
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Ser Glu Thr Pro Tyr Leu Leu Lys Glu Thr Asn Lys Gly Asn Gly Gln  
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Gly Glu Asp Arg Asn Leu Leu Tyr Tyr Ser Lys Leu Gly Leu Val Ile  
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Val Pro Val Tyr Ser Pro Ser Ile Asp Leu Lys Ser Ser Gln Gly Ser  
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Ser Ser Val Ser Ser Asp Ala Pro Gly Asn Val Leu Cys Ala Leu Ser  
370 375 380  
Gln Lys Ser Ser Leu Lys Asp Cys Ser Glu Lys Thr Ala Leu Asp Asp  
385 390 395 400  
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Gln Ser Thr Asp Arg Glu Gly Ala Ser Pro Val Thr Glu Val Arg Ile  
420 425 430  
Lys Thr Glu Pro Ser Ser Pro Leu Ser Asp Pro Ser Asp Ile Ile Arg  
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Val Thr Val Gly Asp Ala Ala Thr Thr Ala Ala Ala Ser Ser Ser Ser  
450 455 460  
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465 470 475 480  
Ser Arg Leu Pro Ala Lys Arg Arg Phe Gln Ala Asp Arg Arg Leu Pro  
485 490 495  
Phe Lys Lys Leu Lys Val Asn Glu His Gly Ser Pro Val Ser Glu Asp  
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515 520 525  
Asp Ser Asp Leu Asn Lys Asp Glu Phe Gly Glu Leu Glu Gly Thr Arg  
530 535 540  
Pro Asn Lys Lys Phe Lys Cys Lys His Cys Leu Lys Ile Phe Arg Ser  
545 550 555 560  
Thr Ala Gly Leu His Arg His Val Asn Met Tyr His Asn Pro Glu Lys  
565 570 575  
Pro Tyr Ala Cys Asp Ile Cys His Lys Arg Phe His Thr Asn Phe Lys  
580 585 590  
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610 615 620  
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<211> 579

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3401

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&lt;210&gt; 3402

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3402

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Leu	Phe	Asp	Val	Pro	Ser	Leu	Asn	Gly	Val	Tyr	Pro	Arg	Met	Asn	Glu
			20					25					30		
Val	Tyr	Thr	Arg	Leu	Gly	Glu	Met	Asn	Asn	Ala	Val	Arg	Asn	Leu	Gln
		35					40					45			
Glu	Leu	Leu	Glu	Leu	Asp	Ser	Ser	Ser	Ser	Leu	Cys	Val	Leu	Val	Ser
		50				55					60				
Thr	Val	Gly	Lys	Leu	Cys	Arg	Leu	Ile	Asn	Glu	Asp	Val	Asn	Glu	Gln
65					70					75					80
Val	Met	Gln	Val	Leu	Gly	Pro	Glu	Asp	Leu	Gln	Ser	Ile	Ile	Tyr	Lys
				85					90					95	
Leu	Glu	Glu	His	Glu	Glu	Phe	Phe	Pro	Ala	Phe	Gln	Ala	Phe	Thr	Asn
			100					105					110		
Asp	Leu	Leu	Glu	Ile	Leu	Glu	Ile	Asp	Asp	Ser	Gly	Cys	His	Cys	Thr
		115					120					125			
Cys	Ser	Lys	Glu	Ile	Lys	Ser	Thr	Phe	Ile	Leu	Lys	Thr	Asn	Gln	Ile
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Ile	Phe	Thr	Val												
145															

&lt;210&gt; 3403

&lt;211&gt; 1696

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3403

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<210> 3404

<211> 286

<212> PRT

<213> Homo sapiens

<400> 3404

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			20					25					30		
Ala	Ser	Glu	Cys	Thr	Glu	Leu	Pro	Lys	Ala	Glu	Lys	Trp	Arg	Arg	Gln
		35					40					45			
Ile	Ile	Gly	Glu	Ile	Ser	Lys	Lys	Val	Ala	Gln	Ile	Gln	Asn	Ala	Gly
	50					55					60				
Leu	Gly	Glu	Phe	Arg	Ile	Arg	Asp	Leu	Asn	Asp	Glu	Ile	Asn	Lys	Leu
65				70					75					80	
Leu	Arg	Glu	Lys	Gly	His	Trp	Glu	Val	Arg	Ile	Lys	Glu	Leu	Gly	Gly
				85				90						95	
Pro	Asp	Tyr	Gly	Lys	Val	Gly	Pro	Lys	Met	Leu	Asp	His	Glu	Gly	Lys
			100					105					110		
Glu	Val	Pro	Gly	Asn	Arg	Gly	Tyr	Lys	Tyr	Phe	Gly	Ala	Ala	Lys	Asp
		115					120					125			
Leu	Pro	Gly	Val	Arg	Glu	Leu	Phe	Glu	Lys	Xaa	Thr	Ser	Ser	Ser	Ser
	130					135						140			
Gln	Xaa	Lys	Thr	Arg	Ala	Glu	Leu	Met	Lys	Ala	Ile	Asp	Phe	Glu	Tyr
145				150					155					160	
Tyr	Gly	Tyr	Leu	Asp	Glu	Asp	Asp	Gly	Val	Ile	Val	Pro	Leu	Glu	Gln
			165					170						175	
Glu	Tyr	Glu	Lys	Lys	Leu	Arg	Ala	Glu	Leu	Val	Glu	Lys	Trp	Lys	Ala
			180					185					190		
Glu	Arg	Glu	Ala	Arg	Leu	Ala	Arg	Gly	Glu	Lys	Glu	Glu	Glu	Glu	Glu
		195					200					205			
Glu	Glu	Glu	Glu	Ile	Asn	Ile	Tyr	Ala	Val	Thr	Glu	Glu	Glu	Ser	Asp
	210					215					220				
Glu	Glu	Gly	Ser	Gln	Glu	Lys	Gly	Gly	Asp	Asp	Ser	Gln	Gln	Lys	Phe
225				230					235					240	
Ile	Ala	His	Val	Pro	Val	Pro	Ser	Gln	Gln	Glu	Ile	Glu	Glu	Ala	Leu
			245					250						255	
Val	Arg	Arg	Lys	Lys	Met	Glu	Leu	Leu	Gln	Lys	Tyr	Ala	Ser	Glu	Thr
			260					265					270		
Leu	Gln	Ala	Gln	Ser	Glu	Glu	Ala	Arg	Arg	Leu	Leu	Gly	Tyr		
		275					280					285			

<210> 3405

<211> 402

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3405

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60  
agacaagctg gagacagcgc caagatgcgg cgctacgacg gggggcttaa aacactggaa  
120  
aacctgctcg cctccatccg taagggcaat gccattgacg aagcggacat cccgccgcca  
180  
gtggccatag gaaaaggccc ggcgccacg cctacctaca gccctgcacc caccagccg  
240  
gccctagaa tcgcgtcagc cccagagccc agggtcaccc tggagggacc ttctgccacc  
300  
gccccagcct catctccagg cttggctaag ccccagatgc ccccaggctc ctgcagccct  
360  
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402

&lt;210&gt; 3406

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3406

Gly	Trp	Glu	Ala	Pro	Leu	Gln	Glu	Arg	Leu	Ala	Phe	Tyr	Gln	Thr	Ala
1				5					10					15	
Ile	Glu	Ser	Ala	Arg	Gln	Ala	Gly	Asp	Ser	Ala	Lys	Met	Arg	Arg	Tyr
			20					25					30		
Asp	Arg	Gly	Leu	Lys	Thr	Leu	Glu	Asn	Leu	Leu	Ala	Ser	Ile	Arg	Lys
		35					40					45			
Gly	Asn	Ala	Ile	Asp	Glu	Ala	Asp	Ile	Pro	Pro	Pro	Val	Ala	Ile	Gly
	50					55					60				
Lys	Gly	Pro	Ala	Ser	Thr	Pro	Thr	Tyr	Ser	Pro	Ala	Pro	Thr	Gln	Pro
65					70					75				80	
Ala	Pro	Arg	Ile	Ala	Ser	Ala	Pro	Glu	Pro	Arg	Val	Thr	Leu	Glu	Gly
			85						90					95	
Pro	Ser	Ala	Thr	Ala	Pro	Ala	Ser	Ser	Pro	Gly	Leu	Ala	Lys	Pro	Gln
			100					105					110		
Met	Pro	Pro	Gly	Pro	Cys	Ser	Pro	Pro	Ser	Gly	Pro	Val	Ala	Glu	Pro
		115					120					125			
Pro	Ala	Arg	Leu	Gln	Ala										
			130												

&lt;210&gt; 3407

&lt;211&gt; 535

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3407

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60  
tttcccggac accatgcctt ctcggcggtg aggcagggtg cggcaccgac aggcccgggg  
120

gggacctttc ccggacaccc aacctcctcg gtggcgaggc aggtggcggc accgacaggc  
 180  
 ccggcgggga cctttcccg ancacctggc ctccttggca agcaggtggc ggcaccaaca  
 240  
 ggcccggggg ggacctttcc cggacacctg gcctcctcgg cgaggcaggt ggcagaactg  
 300  
 gttccacgtc tgatcttcct tagacaaacc tgccttcaga ggaaattgtg ttcaactgga  
 360  
 gaaactggaa aatgtactag atattggctg atatgaagga tatatgtttt aagtatgata  
 420  
 attcgatttt ggctctgtag ggaaaggctc ttattttaaa aagatgtgca ctagagaaaa  
 480  
 aggaaacagc atgtagcaaa tacatccacg gatgtcctcc tggtttaaaa aaaaa  
 535

<210> 3408

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3408

Gly	Met	Arg	Gly	Asp	Gly	Glu	Glu	Pro	Pro	Arg	Thr	Ala	Pro	Ser	Arg
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Ser	Ala	Gly	Thr	Phe	Pro	Gly	His	His	Ala	Phe	Ser	Ala	Val	Arg	Gln
			20					25					30		
Val	Ala	Ala	Pro	Thr	Gly	Pro	Gly	Gly	Thr	Phe	Pro	Gly	His	Pro	Thr
		35					40					45			
Ser	Ser	Val	Ala	Arg	Gln	Val	Ala	Ala	Pro	Thr	Gly	Pro	Ala	Gly	Thr
	50					55					60				
Phe	Pro	Gly	Xaa	Pro	Gly	Leu	Leu	Gly	Lys	Gln	Val	Ala	Ala	Pro	Thr
65					70				75					80	
Gly	Pro	Gly	Gly	Thr	Phe	Pro	Gly	His	Leu	Ala	Ser	Ser	Ala	Arg	Gln
			85					90					95		
Val	Ala	Glu	Leu	Val	Pro	Arg	Leu	Ile	Phe	Leu	Arg	Gln	Thr	Cys	Leu
			100				105					110			
Gln	Arg	Lys	Leu	Cys	Ser	Thr	Gly	Glu	Thr	Gly	Lys	Cys	Thr	Arg	Tyr
	115						120					125			
Trp	Leu	Ile													
	130														

<210> 3409

<211> 959

<212> DNA

<213> Homo sapiens

<400> 3409

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 120  
 gagagagagg aaccttgccg gtccgaggca gctctgcgcg tcccctcctg cgcttagcat  
 180  
 cctcggccca gcgcggcccg caccgccatg gaggtgctgg agagcgggga gcagggcgtg  
 240

ctgcagtggg accgcaagct gagcgagctg tcagagcccg gggacggcga ggccctcatg  
 300  
 taccacacgc acttctcaga acttctggat gagttttccc agaacgtctt gggtcagctc  
 360  
 ctgaatgatc ctttcctctc agagaagagt gtgtcaatgg aggtggaacc ttccccgacg  
 420  
 tccccggcgc ctctcatcca ggctgagcac agctactccc tgtgcgagga gcctcgggccc  
 480  
 cagtcgccct tcacccacat taccaccagt gacagcttca atgacgatga ggtggaaagt  
 540  
 nngagaaatg gtacctgtct acagacttcc cttcaacatc catcaagaca gagccagtta  
 600  
 cagacgaacc acccccagga ctcgttccgt ctgtcactct gaccatcaca gccatctcca  
 660  
 ccncggttg aaaaggagga acctcctctg gaaatgaaca ctgggggttg ttctcgtgc  
 720  
 cagaccatta ttctaaaaat taagctggag cctcatgaag tggatcagtt tctaaacttc  
 780  
 tctcctaaag aaggtctgtc tngccctccc tgtgtccctt tgggttatgg atatggtctc  
 840  
 tgggtctaca gagagggaaat atggcgagag agctgggatg agtttgtacc acagatgttg  
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 tagctggctt tatgaaatag ctctgttctt aaaaaataaa aattttgctt ccaaataaa  
 959

<210> 3410

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3410

Met	Glu	Val	Leu	Glu	Ser	Gly	Glu	Gln	Gly	Val	Leu	Gln	Trp	Asp	Arg
1				5					10					15	
Lys	Leu	Ser	Glu	Leu	Ser	Glu	Pro	Gly	Asp	Gly	Glu	Ala	Leu	Met	Tyr
			20					25					30		
His	Thr	His	Phe	Ser	Glu	Leu	Leu	Asp	Glu	Phe	Ser	Gln	Asn	Val	Leu
		35					40					45			
Gly	Gln	Leu	Leu	Asn	Asp	Pro	Phe	Leu	Ser	Glu	Lys	Ser	Val	Ser	Met
	50					55					60				
Glu	Val	Glu	Pro	Ser	Pro	Thr	Ser	Pro	Ala	Pro	Leu	Ile	Gln	Ala	Glu
65				70				75						80	
His	Ser	Tyr	Ser	Leu	Cys	Glu	Glu	Pro	Arg	Ala	Gln	Ser	Pro	Phe	Thr
				85				90						95	
His	Ile	Thr	Thr	Ser	Asp	Ser	Phe	Asn	Asp	Asp	Glu	Val	Glu	Ser	Xaa
			100				105						110		
Arg	Asn	Gly	Thr	Cys	Leu	Gln	Thr	Ser	Leu	Gln	His	Pro	Ser	Arg	Gln
	115					120					125				
Ser	Gln	Leu	Gln	Thr	Asn	His	Pro	Gln	Asp	Ser	Phe	Arg	Leu	Ser	Leu
	130					135					140				

<210> 3411

<211> 958

<212> DNA

<213> Homo sapiens

&lt;400&gt; 3411

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 60  
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 120  
 cgacggcctc cacagtccgg agcccggcgg agcccggacc tggcggggag agctgcctcc  
 180  
 acggccgggc acccagaccc caccgtcgca gtcgccacca cctcagtcca tccttggtac  
 240  
 cggcaatggg cttcgtatcc tccagtgcac ttgtaactga cttggacacg gaataactaag  
 300  
 aactcacttc tgtcctcatc ccagtgcgc cggcggtgac catctcggct cttttgggct  
 360  
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 420  
 gagattcctg tgacctcat cattaaagca ccgaatcaga aatacagtga ccagactatt  
 480  
 agctgcttct tgaactggac cgtggggaaa ctaaaaacgc atctatctaa cgtttaccct  
 540  
 agcaaaccat tgacgaagga tcagagattg gtgtattcgg gcagactgct tcccgatcat  
 600  
 ctgcagctga aagacattct cagaaaacaa gatgagtatc atatgggttca tctagtatgt  
 660  
 acttctcgga ctctcccag ttctccaaaa tccagcacca atagagaaag tcatgaagca  
 720  
 ttggcatcca gcagcaattc tagttcagat cattcaggat caacaactcc atcatctggt  
 780  
 caagaaacct tgtctttagc tgtgggttct tcctcagaag gattgaggca gcgtaccctt  
 840  
 ccacaagcac aaactgacca agcacagagt caccagtttc catatgtaat gcaaggaaat  
 900  
 gtagacaacc aatttcctgg gcaagctgct ccacctggat tcccagtgtg tcccgcgg  
 958

&lt;210&gt; 3412

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3412

Met	Asp	Gln	Ser	Gly	Met	Glu	Ile	Pro	Val	Thr	Leu	Ile	Ile	Lys	Ala
1				5					10					15	
Pro	Asn	Gln	Lys	Tyr	Ser	Asp	Gln	Thr	Ile	Ser	Cys	Phe	Leu	Asn	Trp
			20					25					30		
Thr	Val	Gly	Lys	Leu	Lys	Thr	His	Leu	Ser	Asn	Val	Tyr	Pro	Ser	Lys
		35					40					45			
Pro	Leu	Thr	Lys	Asp	Gln	Arg	Leu	Val	Tyr	Ser	Gly	Arg	Leu	Leu	Pro
		50				55					60				
Asp	His	Leu	Gln	Leu	Lys	Asp	Ile	Leu	Arg	Lys	Gln	Asp	Glu	Tyr	His
65					70					75				80	
Met	Val	His	Leu	Val	Cys	Thr	Ser	Arg	Thr	Pro	Pro	Ser	Ser	Pro	Lys
			85						90					95	
Ser	Ser	Thr	Asn	Arg	Glu	Ser	His	Glu	Ala	Leu	Ala	Ser	Ser	Ser	Asn



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<210> 3413
<211> 3344
<212> DNA
<213> Homo sapiens
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120
tgtgtcttta  aagatattag  agaagtggga  gctgttgccc  caaaactgtt  ttcttatgta
180
gctactgaag  gaacagaaag  caggaagaaa  gaaaaaagtt  agttgtggcc  ccagaagagt
240
tgtttttcaa  atgccgagcc  gtgaagcctc  atgcactcaa  cacaaagttt  ttctttcata
300
tagataagcc  tgaagaaaaa  agaataagcc  tgagtatgta  ttttaggtgt  ccaactatcc
360
attaccaaga  agaaatctat  tcgtttgagc  ctgagacact  ctttgaggta  aaaaattaga
420
atgaaagaac  ctttggatgg  tgaatgtggc  aaagcagtg  taccacagca  ggagcttctg
480
gacaaaatta  aagaagaacc  agacaatgct  caagagtatg  gatgtgtcca  acagccaaaa
540
actcaagaaa  gtaaattgaa  aattggtgg  gtgtcttcag  ttaatgagag  acctattgcc
600
cagcagttga  acccaggctt  tcagctttct  tttgcatcat  ctggcccaag  tgtgttgctt
660
ccttcagttc  cagctgttgc  tattaagggt  ttttgttctg  gttgtaaaaa  aatgctttat
720
aagggccaaa  ctgcatatca  taagacagga  tctactcagc  tcttctgctc  cacacgatgc
780
atcaccagac  attcttcacc  tgccctgctg  ccacctcctc  ccaagaaaac  ctgcacaaac
840
tgctcgaaag  acatttttaa  tcctaaggat  gtgatcacia  ctcgctttga  gaattcctat
900
cctagcaaag  atttctgcag  ccaatcatgc  ttgtcatctt  atgagctaaa  gaaaaaacct
960
gttgttacca  tatataccaa  aagcatttca  actaagtgca  gtatgtgtca  gaagaatgct
1020
gatactcgat  ttgaagttaa  atatcaaaat  gtggtacatg  gtctttgtag  tgatgcctgt
1080

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ttttcaaaat ttcactctac aaacaacctc accacgaact gttgtgagaa ctgtgggagc  
1140  
tattgctata gtagctctgg tccttgccaa tcccagaagg tttttagttc aacaagtgtc  
1200  
acggcataca agcagaattc tgcccaaatt cctccatatg ccctggggaa gtcattgaga  
1260  
tcctcagcag aaatgattga aaataccaat agcttgggga agacagagct tttctgttct  
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1380  
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1560  
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1620  
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1680  
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1740  
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1920  
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1980  
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2160  
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2220  
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2280  
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2340  
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2580  
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2640  
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2700

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 3060  
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 3120  
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 3180  
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 3240  
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 3344

&lt;210&gt; 3414

&lt;211&gt; 723

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3414

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Gln	Glu	Leu	Leu	Asp	Lys	Ile	Lys	Glu	Glu	Pro	Asp	Asn	Ala	Gln	Glu
			20					25					30		
Tyr	Gly	Cys	Val	Gln	Gln	Pro	Lys	Thr	Gln	Glu	Ser	Lys	Leu	Lys	Ile
		35					40					45			
Gly	Gly	Val	Ser	Ser	Val	Asn	Glu	Arg	Pro	Ile	Ala	Gln	Gln	Leu	Asn
		50				55					60				
Pro	Gly	Phe	Gln	Leu	Ser	Phe	Ala	Ser	Ser	Gly	Pro	Ser	Val	Leu	Leu
65					70					75				80	
Pro	Ser	Val	Pro	Ala	Val	Ala	Ile	Lys	Val	Phe	Cys	Ser	Gly	Cys	Lys
				85					90					95	
Lys	Met	Leu	Tyr	Lys	Gly	Gln	Thr	Ala	Tyr	His	Lys	Thr	Gly	Ser	Thr
			100					105					110		
Gln	Leu	Phe	Cys	Ser	Thr	Arg	Cys	Ile	Thr	Arg	His	Ser	Ser	Pro	Ala
		115					120					125			
Cys	Leu	Pro	Pro	Pro	Pro	Lys	Lys	Thr	Cys	Thr	Asn	Cys	Ser	Lys	Asp
		130				135					140				
Ile	Leu	Asn	Pro	Lys	Asp	Val	Ile	Thr	Thr	Arg	Phe	Glu	Asn	Ser	Tyr
145					150					155				160	
Pro	Ser	Lys	Asp	Phe	Cys	Ser	Gln	Ser	Cys	Leu	Ser	Ser	Tyr	Glu	Leu
			165						170					175	
Lys	Lys	Lys	Pro	Val	Val	Thr	Ile	Tyr	Thr	Lys	Ser	Ile	Ser	Thr	Lys
			180					185					190		
Cys	Ser	Met	Cys	Gln	Lys	Asn	Ala	Asp	Thr	Arg	Phe	Glu	Val	Lys	Tyr

2590

625		630		635		640									
Leu	Ser	Thr	Gly	Asn	Thr	Asn	Ser	Val	Leu	Lys	Gly	Ala	Val	Thr	Lys
				645					650					655	
Glu	Ala	Ala	Lys	Ile	Ile	Gln	Asp	Glu	Ser	Thr	Gln	Glu	Asp	Ala	Met
			660					665					670		
Lys	Phe	Pro	Ser	Ser	Gln	Ser	Ser	Gln	Pro	Ser	Arg	Leu	Leu	Lys	Asn
		675					680				685				
Lys	Gly	Ile	Ser	Cys	Lys	Pro	Val	Thr	Gln	Thr	Lys	Ala	Thr	Ser	Cys
	690					695					700				
Lys	Pro	His	Thr	Gln	His	Lys	Glu	Cys	Gln	Thr	Glu	Cys	Pro	Val	Arg
705					710				715					720	
Ala	Val	Cys													

&lt;210&gt; 3415

&lt;211&gt; 3501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3415

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120
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&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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1416

&lt;210&gt; 3426

&lt;211&gt; 410

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3426

Ser	Gly	Gly	Lys	Gly	Leu	Cys	Cys	Cys	Ala	Arg	Ala	Gly	Ala	Ala	Ala
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Ala	Pro	Gly	Pro	Ala	Ser	Arg	Arg	Gly	Ala	Val	Gln	Ala	Gly	Gly	Asp
			20					25					30		
Ser	Leu	Gly	Arg	Asp	Pro	Gly	Arg	Glu	Glu	Glu	Val	Arg	Pro	Arg	Gly
		35					40					45			
Arg	Lys	Ala	Ala	Ser	Pro	Gly	Ala	Pro	Arg	Pro	Trp	Pro	Arg	His	Ser
	50					55					60				
Thr	His	Met	Ala	Ser	Gly	Val	Gly	Ala	Ala	Phe	Glu	Glu	Leu	Pro	His

65		70		75		80									
Asp	Gly	Thr	Cys	Asp	Glu	Cys	Glu	Pro	Asp	Glu	Ala	Pro	Gly	Ala	Glu
				85					90					95	
Glu	Val	Cys	Arg	Glu	Cys	Gly	Phe	Cys	Tyr	Cys	Arg	Arg	His	Ala	Glu
			100					105					110		
Ala	His	Arg	Gln	Lys	Phe	Leu	Ser	His	His	Leu	Ala	Glu	Tyr	Val	His
		115					120					125			
Gly	Ser	Gln	Ala	Trp	Thr	Pro	Pro	Ala	Asp	Gly	Glu	Gly	Ala	Gly	Lys
	130					135					140				
Glu	Glu	Ala	Glu	Val	Lys	Val	Glu	Gln	Glu	Arg	Glu	Ile	Glu	Ser	Glu
145					150					155				160	
Ala	Gly	Glu	Glu	Ser	Glu	Ser	Glu	Glu	Glu	Ser	Glu	Ser	Glu	Glu	Glu
				165					170					175	
Ser	Glu	Thr	Glu	Glu	Glu	Ser	Glu	Asp	Glu	Ser	Asp	Glu	Glu	Ser	Glu
		180						185				190			
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	195						200					205			
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	210					215					220				
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225					230					235				240	
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			245					250						255	
Gln	Glu	Asp	Arg	Gln	Leu	Ile	Cys	Val	Leu	Cys	Pro	Val	Ile	Gly	Ala
		260					265						270		
His	Gln	Gly	His	Gln	Leu	Ser	Thr	Leu	Asp	Glu	Ala	Phe	Glu	Glu	Leu
	275						280					285			
Arg	Ser	Lys	Asp	Ser	Gly	Gly	Leu	Lys	Ala	Ala	Met	Ile	Glu	Leu	Val
	290				295						300				
Glu	Arg	Leu	Lys	Phe	Lys	Ser	Ser	Asp	Pro	Lys	Val	Thr	Arg	Asp	Gln
305					310					315				320	
Met	Lys	Met	Phe	Ile	Gln	Gln	Glu	Phe	Lys	Lys	Val	Gln	Lys	Val	Ile
			325					330						335	
Ala	Asp	Glu	Glu	Gln	Lys	Ala	Leu	His	Leu	Val	Asp	Ile	Gln	Glu	Ala
		340					345					350			
Met	Ala	Thr	Ala	His	Val	Thr	Glu	Ile	Leu	Ala	Asp	Ile	Gln	Ser	His
	355						360					365			
Met	Asp	Arg	Leu	Met	Thr	Gln	Met	Ala	Gln	Ala	Lys	Glu	Gln	Leu	Asp
	370				375						380				
Thr	Ser	Asn	Glu	Ser	Ala	Glu	Pro	Lys	Ala	Glu	Gly	Asp	Glu	Glu	Gly
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Pro	Ser	Gly	Ala	Ser	Glu	Glu	Glu	Asp	Thr						
			405					410							

&lt;210&gt; 3427

&lt;211&gt; 580

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3427

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120



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&lt;210&gt; 3428

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3428

Met	Asp	Ser	Leu	Ala	Leu	Ser	Asn	Ile	Thr	Gly	Ala	Ser	Val	Asp	Gly
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Glu	Asn	Lys	Pro	Arg	Pro	Ser	Leu	Tyr	Ser	Leu	Gln	Asn	Phe	Glu	Glu
			20					25					30		
Met	Glu	Thr	Glu	Asp	Cys	Glu	Lys	Met	Ser	Asn	Met	Gly	Thr	Leu	Asn
		35					40					45			
Ser	Ser	Met	Leu	His	Arg	Ser	Ala	Glu	Ser	Leu	Lys	Ser	Leu	Ser	Ser
		50				55					60				
Glu	Leu	Cys	Pro	Glu	Lys	Ile	Leu	Pro	Glu	Glu	Lys	Pro	Val	His	Leu
65					70				75					80	
Pro	Val	Leu	Arg	Arg	Ser	Lys	Ser	Gln	Ser	Arg	Pro	Gln	Gln	Val	Lys
			85					90						95	
Phe	Ser	Asp	Asp	Val	Ile	Asp	Asn	Gly	Asn	Tyr	Asp	Ile	Glu	Ile	Arg
			100					105					110		
Gln	Pro	Pro	Met	Ser	Glu	Arg	Thr	Arg	Arg	Arg	Val	Tyr	Asn	Phe	Glu
			115				120					125			
Glu	Arg	Gly	Ser												
			130												

&lt;210&gt; 3429

&lt;211&gt; 634

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3429

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<210> 3430  
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 <212> PRT  
 <213> Homo sapiens

<400> 3430  
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 20 25 30  
 Tyr Thr Val Thr Thr Val Thr Thr Gln Gly Phe Pro Leu Pro Thr Gly  
 35 40 45  
 Gln His Ile Pro Gly Cys Ser Ala Gln Gln Leu Pro Ala Cys Ser Val  
 50 55 60  
 Met Phe Ser Gly Gln His Tyr Pro Leu Cys Cys Leu Pro Pro Pro Leu  
 65 70 75 80  
 Ile Gln Ala Cys Thr Met Gln Gln Leu Pro Val Pro Tyr Gln Ala Tyr  
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 Pro His Leu Ile Ser Ser Asp His Tyr Ile Leu His Pro Pro Pro Pro  
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 115 120

<210> 3431  
 <211> 1396  
 <212> DNA  
 <213> Homo sapiens

<400> 3431  
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 180  
 agcgcgcgca gccgtgtcgc caacagtacc aaatcgctcg gcagcggctt cgcgccgccc  
 240

gacttcaacc attgcctcaa ggattgggac tataatggcc ttctgtgtct caccaccaac  
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 gccatcggcc agtgggatct ggtgtgtgac ctgggctggc aggtgatcct ggagcagatc  
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 1380  
 ggcctgggcc tgatca  
 1396

&lt;210&gt; 3432

&lt;211&gt; 296

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3432

Met	Ala	Leu	Arg	Phe	Leu	Leu	Gly	Phe	Leu	Leu	Ala	Gly	Val	Asp	Leu
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Gly	Val	Tyr	Leu	Met	Arg	Leu	Glu	Leu	Cys	Asp	Pro	Thr	Gln	Arg	Leu
20				25				30							
Arg	Val	Ala	Leu	Ala	Gly	Glu	Leu	Val	Gly	Val	Gly	Gly	His	Phe	Leu
	35					40					45				
Phe	Leu	Gly	Leu	Ala	Leu	Val	Ser	Lys	Asp	Trp	Arg	Phe	Leu	Gln	Arg

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Leu Phe Leu Glu Ser Ala Arg Trp Leu Ile Val Lys Arg Gln Ile Glu
      85      90      95
Glu Ala Gln Ser Val Leu Arg Ile Leu Ala Glu Arg Asn Arg Pro His
      100      105      110
Gly Gln Met Leu Gly Glu Glu Ala Gln Glu Ala Leu Gln Asp Leu Glu
      115      120      125
Asn Thr Cys Pro Leu Pro Ala Thr Ser Ser Phe Ser Phe Ala Ser Leu
      130      135      140
Leu Asn Tyr Arg Asn Ile Trp Lys Asn Leu Leu Ile Leu Gly Phe Thr
145      150      155      160
Asn Phe Ile Ala His Ala Ile Arg His Cys Tyr Gln Pro Val Gly Gly
      165      170      175
Gly Gly Ser Pro Ser Asp Phe Tyr Leu Cys Ser Leu Leu Ala Ser Gly
      180      185      190
Thr Ala Ala Leu Ala Cys Val Phe Leu Gly Val Thr Val Asp Arg Phe
      195      200      205
Gly Arg Arg Gly Ile Leu Leu Leu Ser Met Thr Leu Thr Gly Ile Ala
      210      215      220
Ser Leu Val Leu Leu Gly Leu Trp Asp Cys Glu His Pro Ile Phe Pro
225      230      235      240
Thr Val Trp Ala Gln Gln Gly Asn Pro Asn Arg Asp Leu Asn Glu Ala
      245      250      255
Ala Ile Thr Thr Phe Ser Val Leu Gly Leu Phe Ser Ser Gln Ala Ala
      260      265      270
Ala Ile Leu Ser Thr Leu Leu Ala Ala Glu Val Ile Pro Thr Thr Val
      275      280      285
Arg Gly Arg Gly Leu Gly Leu Ile
      290      295

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&lt;210&gt; 3433

&lt;211&gt; 1257

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3433

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&lt;210&gt; 3434

&lt;211&gt; 311

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3434

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			20					25					30		
Gly	Arg	Gln	Arg	Pro	Gln	Arg	Pro	Ser	His	Ser	Arg	Ser	His	Thr	Arg
		35					40					45			
Ser	Asn	Leu	Lys	Arg	Asp	Val	Ala	His	Leu	Tyr	Arg	Gly	Val	Gly	Ser
	50				55					60					
Arg	Tyr	Ile	Met	Gly	Ser	Gly	Glu	Ser	Phe	Met	Gln	Leu	Gln	Gln	Arg
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Leu	Leu	Arg	Glu	Lys	Glu	Ala	Lys	Ile	Arg	Lys	Ala	Leu	Asp	Arg	Leu
			85					90					95		
Arg	Lys	Lys	Arg	His	Leu	Leu	Arg	Arg	Gln	Arg	Thr	Arg	Arg	Glu	Phe
			100					105					110		
Pro	Val	Ile	Ser	Val	Val	Gly	Tyr	Thr	Asn	Cys	Gly	Glu	His	Ala	Pro
		115					120					125			
Arg	Gly	Gly	Ala	Phe	Arg	Gly	Leu	Arg	Val	Thr	Gly	Glu	Asp	Ser	Pro
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Cys	Gly	Glu	His	Val	Pro	Arg	Arg	Gly	Gly	Ser	His	Gly	Arg	Arg	Val

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Gly	Tyr	Thr	Ser	Cys	Cys	Glu	Ser	Ser	Pro	Arg	Arg	Arg	Val	Ser	Cys		
			180					185					190				
Gly	Leu	Cys	Val	Gly	Tyr	Ser	Ser	Gln	Gly	Glu	Asp	Val	Ile	Tyr	Pro		
		195				200					205						
Ile	Leu	Pro	Ser	Arg	Ala	Leu	Pro	Pro	Cys	Leu	Tyr	His	Asn	Leu	Pro		
	210					215					220						
Ser	Ile	Tyr	Thr	Ile	Leu	Leu	Ser	Arg	Pro	Ser	Pro	Leu	Pro	Tyr	Leu		
225					230				235					240			
Tyr	His	His	Pro	Val	Tyr	Thr	Ile	His	Pro	Ser	Thr	Pro	Ser	Pro	Leu		
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		260				265					270						
Ile	Pro	Pro	Pro	Arg	Leu	His	Asn	Pro	Pro	Val	Tyr	Thr	Thr	Met	Ser		
	275					280					285						
Pro	Ser	Ser	Ala	Pro	Ser	Ser	Cys	Leu	His	Trp	His	His	Cys	Pro	Ser		
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Tyr	Thr	Thr	Thr	Pro	Ser	Thr											
305					310												

&lt;210&gt; 3435

&lt;211&gt; 1225

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3435

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840

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2040  
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2081

&lt;210&gt; 3438

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3438

Ala	Cys	Gln	Phe	Leu	Cys	Thr	Gln	Ala	Leu	Ser	Ile	Leu	Gly	Gln	His
1				5					10					15	
Arg	Pro	Pro	Lys	Arg	Asp	Phe	Gln	Val	Glu	Ala	Thr	Thr	Ala	Glu	Asp
			20					25					30		
Glu	Ala	Glu	Pro	Gln	Trp	Glu	Arg	Glu	Gly	Ala	Arg	Phe	Thr	Thr	Pro

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<210> 3439
<211> 1519
<212> DNA
<213> Homo sapiens
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2612

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 1320  
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 1380  
 caggactctt cccaccgcct cccagcgcct gcctgctggg gctgcctgca tgcctcccct  
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 1519

<210> 3440  
 <211> 287  
 <212> PRT  
 <213> Homo sapiens

<400> 3440  
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 35 40 45  
 Thr Ser Pro Met Pro Pro Pro Ala Ala Leu Arg Pro Pro Ala Gly Pro  
 50 55 60  
 Arg Arg Pro Arg Xaa Pro Gly Gly Pro Gln His His Gln Pro Gln Pro  
 65 70 75 80  
 Pro Leu Trp Thr Pro Thr Pro Pro Ser Pro Ala Ser Asp Trp Pro Pro  
 85 90 95  
 Leu Pro Pro Asn Arg Pro Pro Gln Asn Pro Gly Pro Thr Leu Pro Trp  
 100 105 110  
 Arg Gln Arg Asp Lys Gly Gly Pro Ser Pro Leu Pro Glu Ala Arg Thr  
 115 120 125  
 Pro Trp Gly Gly Gly Glu Asp Val Ser Ala Gly Pro Leu Xaa Thr Pro  
 130 135 140  
 Phe Leu Ser Ala Pro Leu Val Pro Arg Ser Pro Gly Gly Glu Ser Ala  
 145 150 155 160  
 Asp Ser Ser Gln Ala Gly Thr Arg Leu Val Pro Glu His Ala Ala Ala  
 165 170 175  
 His Thr Gln Gly His Gly Pro Ser Gly Pro Gly Thr Trp Ser Gly Ser  
 180 185 190  
 Glu Arg Pro Gly Cys Leu Ala Asp Arg Thr Ser Glu Thr Thr Gln Pro  
 195 200 205  
 Ser Phe Glu Asp Ala Pro Ala Gln Pro Ser Pro Gly Val Pro Trp Arg  
 210 215 220  
 Thr Thr Leu Ala Glu Thr Leu Leu Ile Pro Gly Leu Glu Leu Leu Gly  
 225 230 235 240  
 Gly Arg Gln Ala Ser Thr Pro Thr Leu Gly Asn Ala Glu Pro Leu Arg  
 245 250 255  
 Met Cys Ala Arg Gly Arg Val Cys Val Phe Leu Arg Val Ser Leu Phe

			260					265				270		
Arg	Ser	Asn	Leu	Val	Pro	Gly	Ala	Ala	Gly	Leu	Cys	Met	Leu	Val
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&lt;210&gt; 3441

&lt;211&gt; 2074

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3441

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 2074

&lt;210&gt; 3442

&lt;211&gt; 374

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3442

Met	Val	Gly	Lys	Asn	Val	Lys	Leu	Tyr	Asp	Met	Val	Leu	Gln	Phe	Leu
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Arg	Thr	Leu	Phe	Leu	Arg	Thr	Arg	Asn	Val	His	Tyr	Cys	Thr	Leu	Arg
			20					25					30		
Ala	Glu	Leu	Leu	Met	Ser	Leu	His	Asp	Leu	Asp	Val	Gly	Glu	Ile	Cys
		35					40					45			
Thr	Val	Asp	Pro	Cys	His	Lys	Phe	Thr	Trp	Cys	Leu	Asp	Ala	Cys	Ile
	50					55					60				
Arg	Glu	Arg	Phe	Val	Asp	Ser	Lys	Arg	Ala	Arg	Glu	Leu	Gln	Gly	Phe
65				70					75					80	
Leu	Asp	Asp	Val	Lys	Lys	Gly	Gln	Glu	Gln	Val	Leu	Gly	Asp	Leu	Ser
			85					90					95		
Met	Ile	Leu	Cys	Asp	Pro	Phe	Ala	Ile	Asn	Thr	Leu	Ala	Leu	Ser	Thr
		100					105						110		
Val	Arg	His	Leu	Gln	Glu	Leu	Val	Gly	Gln	Glu	Thr	Leu	Pro	Arg	Asp
	115					120						125			
Ser	Pro	Asp	Leu	Leu	Leu	Leu	Leu	Arg	Leu	Leu	Ala	Leu	Gly	Gln	Gly
	130					135					140				
Ala	Trp	Asp	Met	Ile	Asp	Ser	Gln	Val	Phe	Lys	Glu	Pro	Lys	Met	Glu
145				150					155					160	
Val	Glu	Leu	Ile	Thr	Arg	Phe	Leu	Pro	Met	Leu	Met	Ser	Phe	Leu	Val

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Asp Asp Tyr Thr Phe Asn Val Asp Gln Lys Leu Pro Ala Glu Glu Lys
      180      185      190
Ala Pro Val Ser Tyr Pro Asn Thr Leu Pro Glu Ser Phe Thr Lys Phe
      195      200      205
Leu Gln Glu Gln Arg Met Ala Cys Glu Val Gly Leu Tyr Tyr Val Leu
      210      215      220
His Ile Thr Lys Gln Arg Asn Lys Asn Ala Leu Leu Arg Leu Leu Pro
225      230      235      240
Gly Leu Val Glu Thr Phe Gly Asp Leu Ala Phe Gly Asp Ile Phe Leu
      245      250      255
His Leu Leu Thr Gly Asn Leu Ala Leu Leu Ala Asp Glu Phe Ala Leu
      260      265      270
Glu Asp Phe Cys Ser Ser Leu Phe Asp Gly Phe Phe Leu Thr Ala Ser
      275      280      285
Pro Arg Lys Glu Asn Val His Arg His Ala Leu Arg Leu Leu Ile His
      290      295      300
Leu His Pro Arg Val Ala Pro Ser Lys Leu Glu Ala Leu Gln Lys Ala
305      310      315      320
Leu Glu Pro Thr Gly Gln Ser Gly Glu Ala Val Lys Glu Leu Tyr Ser
      325      330      335
Gln Leu Gly Glu Lys Leu Glu Gln Leu Asp His Arg Lys Pro Ser Pro
      340      345      350
Ala Gln Ala Ala Glu Thr Pro Ala Leu Glu Leu Pro Leu Pro Ser Val
      355      360      365
Pro Ala Pro Ala Pro Leu
      370

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&lt;210&gt; 3443

&lt;211&gt; 2070

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3443

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600

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&lt;210&gt; 3444

&lt;211&gt; 579

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3444

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Ser Thr Glu Glu Asn Lys Ile Lys Val Cys Tyr Val Asp Tyr Gly Phe
          20           25           30
Ser Glu Asn Val Glu Lys Ser Lys Ala Tyr Lys Leu Asn Pro Lys Phe
          35           40           45
Cys Ser Leu Ser Phe Gln Ala Thr Lys Cys Lys Leu Ala Gly Leu Glu
          50           55           60
Val Leu Ser Asp Asp Pro Asp Leu Val Lys Val Val Glu Ser Leu Thr
65           70           75           80
Cys Gly Lys Ile Phe Ala Val Glu Ile Leu Asp Lys Ala Asp Ile Pro
          85           90           95
Leu Val Val Leu Tyr Asp Thr Ser Gly Glu Asp Asp Ile Asn Ile Asn
          100          105          110
Ala Thr Cys Leu Lys Ala Ile Cys Asp Lys Ser Leu Glu Val His Leu
          115          120          125
Gln Val Asp Ala Met Tyr Thr Asn Val Lys Ile Thr Asn Ile Cys Ser
          130          135          140
Asp Gly Thr Leu Tyr Cys Gln Val Pro Cys Lys Gly Leu Asn Lys Leu
145          150          155          160
Ser Asp Leu Leu Arg Lys Ile Glu Asp Tyr Phe His Cys Lys His Met
          165          170          175
Thr Ser Glu Cys Phe Val Ser Leu Pro Phe Cys Gly Lys Ile Cys Leu
          180          185          190
Phe His Cys Lys Gly Lys Trp Leu Arg Val Glu Ile Thr Asn Val His
          195          200          205
Ser Ser Arg Ala Leu Asp Val Gln Phe Leu Asp Ser Gly Thr Val Thr
          210          215          220
Ser Val Lys Val Ser Glu Leu Arg Glu Ile Pro Pro Arg Phe Leu Gln
225          230          235          240
Glu Met Ile Ala Ile Pro Pro Gln Ala Ile Lys Cys Cys Leu Ala Asp
          245          250          255
Leu Pro Gln Ser Ile Gly Met Trp Thr Pro Asp Ala Val Leu Trp Leu
          260          265          270
Arg Asp Ser Val Leu Asn Cys Ser Asp Cys Ser Ile Lys Val Thr Lys
          275          280          285
Val Asp Glu Thr Arg Gly Ile Ala His Val Tyr Leu Phe Thr Pro Lys
          290          295          300
Asn Phe Pro Asp Pro His Arg Ser Ile Asn Arg Gln Ile Thr Asn Ala
305          310          315          320
Asp Leu Trp Lys His Gln Lys Asp Val Phe Leu Ser Ala Ile Ser Ser
          325          330          335
Gly Ala Asp Ser Pro Asn Ser Lys Asn Gly Asn Met Pro Met Ser Gly
          340          345          350
Asn Thr Gly Glu Asn Phe Arg Lys Asn Leu Thr Asp Val Ile Lys Lys
          355          360          365
Ser Met Val Asp His Thr Ser Ala Phe Ser Thr Glu Glu Leu Pro Pro
          370          375          380
Pro Val His Leu Ser Lys Pro Gly Glu His Met Asp Val Tyr Val Pro
385          390          395          400
Val Ala Cys His Pro Gly Tyr Phe Val Ile Gln Pro Trp Gln Glu Ile

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405 410 415  
 His Lys Leu Glu Val Leu Met Glu Glu Met Ile Leu Tyr Tyr Ser Val  
 420 425 430  
 Ser Glu Glu Arg His Ile Ala Val Glu Lys Asp Gln Val Tyr Ala Ala  
 435 440 445  
 Lys Val Glu Asn Lys Trp His Arg Val Leu Leu Lys Gly Ile Leu Thr  
 450 455 460  
 Asn Gly Leu Val Ser Val Tyr Glu Leu Asp Tyr Gly Lys His Glu Leu  
 465 470 475 480  
 Val Asn Ile Arg Lys Val Gln Pro Leu Val Asp Met Phe Arg Lys Leu  
 485 490 495  
 Pro Phe Gln Ala Val Thr Ala Gln Leu Ala Gly Val Lys Cys Asn Gln  
 500 505 510  
 Trp Ser Glu Glu Ala Ser Met Val Phe Arg Asn His Val Glu Lys Lys  
 515 520 525  
 Pro Leu Val Ala Leu Val Gln Thr Val Ile Glu Asn Ala Asn Pro Trp  
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 Asp Arg Lys Val Val Val Tyr Leu Val Asp Thr Ser Leu Pro Asp Thr  
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 Lys Val Asn

<210> 3445  
 <211> 2086  
 <212> DNA  
 <213> Homo sapiens

<400> 3445  
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2086

&lt;210&gt; 3446

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3446

Met Asp Ala Leu Glu Gly Glu Ser Phe Ala Leu Ser Phe Ser Ser Ala

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20	25	30	
Met Asp Asp Glu Phe Gln Leu Leu Gln Arg Asn Phe Met Asp Lys Tyr			
35	40	45	
Tyr Leu Glu Phe Glu Asp Thr Glu Glu Asn Lys Leu Ile Tyr Thr Pro			
50	55	60	
Ile Phe Asn Glu Tyr Ile Ser Leu Val Glu Lys Tyr Ile Glu Glu Gln			
65	70	75	80
Leu Leu Gln Arg Ile Pro Glu Phe Asn Met Ala Ala Phe Thr Thr Thr			
85	90	95	
Leu His His Leu Phe Arg Leu Arg His His Lys Asp Glu Val Ala Gly			
100	105	110	
Asp Ile Phe Asp Met Leu Leu Thr Phe Thr Asp Phe Leu Ala Phe Lys			
115	120	125	
Glu Met Phe Leu Asp Tyr Arg Ala Glu Lys Glu Gly Arg Gly Leu Asp			
130	135	140	
Leu Ser Ser Gly Leu Val Val Thr Ser Leu Cys Lys Ser Ser Ser Leu			
145	150	155	160
Pro Ala Ser Gln Asn Asn Leu Arg His			
165			

&lt;210&gt; 3447

&lt;211&gt; 936

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3447

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 120  
 ggggtgcgct ttgaccgcga gagggcgcg cgcctgtggg aagccgtgtc cggtgcccag  
 180  
 ccggtgggta gagaggaagt ggagcacatg atccagaaga accaatgtct cttcaccaac  
 240  
 acccagtgtg aggtttgctg cgccttgctt atttctgagt cccagaagct ggcacattac  
 300  
 cagagcaaaa aacatgccaa caaagtgaag agatacctag caatccatgg aatggagaca  
 360  
 ttaaaggggg aaacgaagaa gctagactca gatcagaaga gcagcagaag caaagacaag  
 420  
 aaccagtgtc gcccctctg taacatgacc ttttcctccc ctgtcgtggc ccagtcgcac  
 480  
 tacctgggga agaccacgc aaagaactta aagctgaagc agcagtcac taaggtggaa  
 540  
 gccttgacc agaatagaga gatgatagac ccagacaagt tctgcagcct ctgccatgca  
 600  
 actttcaacg accctgtcat ggctcaacaa cattatgtgg gcaagaaaca cagaaaacag  
 660  
 gagaccaagc tcaaactaat ggcacgctat gggcggctgg cggaccctgc tgtcactgac  
 720  
 tttccagctg gaaagggcta cccctgcaaa acatgtaaga tagtgctgaa ctccatagaa  
 780

cagtaccaag ctcatgtcag cggtttcaaa cacaagaacc agtcaccaa aacagtggca  
 840  
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 900  
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 936

<210> 3448

<211> 302

<212> PRT

<213> Homo sapiens

<400> 3448

Thr	Arg	Glu	Gly	Phe	Ala	Gly	Lys	Met	Glu	Tyr	Pro	Ala	Pro	Ala	Thr
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Val	Gln	Ala	Ala	Asp	Gly	Gly	Ala	Ala	Gly	Pro	Tyr	Ser	Ser	Ser	Glu
			20					25					30		
Leu	Leu	Glu	Gly	Gln	Glu	Pro	Asp	Gly	Val	Arg	Phe	Asp	Arg	Glu	Arg
		35					40					45			
Ala	Arg	Arg	Leu	Trp	Glu	Ala	Val	Ser	Gly	Ala	Gln	Pro	Val	Gly	Arg
	50					55					60				
Glu	Glu	Val	Glu	His	Met	Ile	Gln	Lys	Asn	Gln	Cys	Leu	Phe	Thr	Asn
65					70				75						80
Thr	Gln	Cys	Lys	Val	Cys	Cys	Ala	Leu	Leu	Ile	Ser	Glu	Ser	Gln	Lys
			85						90					95	
Leu	Ala	His	Tyr	Gln	Ser	Lys	Lys	His	Ala	Asn	Lys	Val	Lys	Arg	Tyr
			100					105					110		
Leu	Ala	Ile	His	Gly	Met	Glu	Thr	Leu	Lys	Gly	Glu	Thr	Lys	Lys	Leu
		115				120						125			
Asp	Ser	Asp	Gln	Lys	Ser	Ser	Arg	Ser	Lys	Asp	Lys	Asn	Gln	Cys	Cys
	130					135					140				
Pro	Ile	Cys	Asn	Met	Thr	Phe	Ser	Ser	Pro	Val	Val	Ala	Gln	Ser	His
145					150					155					160
Tyr	Leu	Gly	Lys	Thr	His	Ala	Lys	Asn	Leu	Lys	Leu	Lys	Gln	Gln	Ser
			165						170					175	
Thr	Lys	Val	Glu	Ala	Leu	His	Gln	Asn	Arg	Glu	Met	Ile	Asp	Pro	Asp
		180						185					190		
Lys	Phe	Cys	Ser	Leu	Cys	His	Ala	Thr	Phe	Asn	Asp	Pro	Val	Met	Ala
		195					200					205			
Gln	Gln	His	Tyr	Val	Gly	Lys	Lys	His	Arg	Lys	Gln	Glu	Thr	Lys	Leu
		210				215						220			
Lys	Leu	Met	Ala	Arg	Tyr	Gly	Arg	Leu	Ala	Asp	Pro	Ala	Val	Thr	Asp
225					230					235					240
Phe	Pro	Ala	Gly	Lys	Gly	Tyr	Pro	Cys	Lys	Thr	Cys	Lys	Ile	Val	Leu
			245						250					255	
Asn	Ser	Ile	Glu	Gln	Tyr	Gln	Ala	His	Val	Ser	Gly	Phe	Lys	His	Lys
			260					265					270		
Asn	Gln	Ser	Pro	Lys	Thr	Val	Ala	Ser	Ser	Leu	Gly	Gln	Ile	Pro	Met
		275					280					285			
Gln	Arg	Gln	Pro	Ile	Gln	Lys	Asp	Ser	Thr	Thr	Leu	Glu	Asp		
		290				295						300			

<210> 3449

<211> 877

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3449

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ccccccggcg ccccggctct gccgctgcac aattcctccg tgactgccaa ctcccagttc  
120  
ccggcccttc tggccggcac caaccccggt gctgtcgtcg cggatggagg cagttgcccc  
180  
gcacactacc cgggtgcacga gtgcgtcttc aagggggatg tgaggagact ctcctctctc  
240  
atccgcacgc acaatatcgg gcagaaagat aatcacggaa atactccttt acaccttgct  
300  
gtgatgttag gaaataaaga atgtgcccat ttacttttgg ctcacaatgc tccagtcaag  
360  
gtgaaaaatg ctcagggatg gagccctctg gcggaagcca tcagctatgg agataggcag  
420  
atgattacag ctcttttgag gaagcttaag cagcaatcca gggaaagtgt tgaagaaaaa  
480  
cgacctcgat tattaaaagc cctgaaagag ctaggtgact tttatctaga acttcactgg  
540  
gattttcaaa gctgggtgcc ttacttttcc cgaattctgc cttccgatgc atgtaaaata  
600  
tacaacaag gtatcaatat caggcttgac acaactctca tagactttac tgacatgaag  
660  
tgccaacgag gggatctaag cttcattttc aatggggatg cggcgccctc tgaatctttt  
720  
gtagtattag acaatgaaca aaaagtttat cagcgaatac atcatgaggc tcacatccca  
780  
ggaatcagag atggaaacag aagaagaggt ggatatttta atgagcagtg atatttactc  
840  
tgcaacttta tcaacaaaat caatttcttt cacgcgt  
877

&lt;210&gt; 3450

&lt;211&gt; 276

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3450

Xaa	Ile	Phe	Ser	Asn	His	His	His	Arg	Leu	Gln	Leu	Lys	Ala	Ala	Pro	
1				5				10						15		
Ala	Ser	Ser	Asn	Pro	Pro	Gly	Ala	Pro	Ala	Leu	Pro	Leu	His	Asn	Ser	
			20					25					30			
Ser	Val	Thr	Ala	Asn	Ser	Gln	Ser	Pro	Ala	Leu	Leu	Ala	Gly	Thr	Asn	
		35				40						45				
Pro	Val	Ala	Val	Val	Ala	Asp	Gly	Gly	Ser	Cys	Pro	Ala	His	Tyr	Pro	
	50					55					60					
Val	His	Glu	Cys	Val	Phe	Lys	Gly	Asp	Val	Arg	Arg	Leu	Ser	Ser	Leu	
65					70					75					80	
Ile	Arg	Thr	His	Asn	Ile	Gly	Gln	Lys	Asp	Asn	His	Gly	Asn	Thr	Pro	
			85					90					95			
Leu	His	Leu	Ala	Val	Met	Leu	Gly	Asn	Lys	Glu	Cys	Ala	His	Leu	Leu	

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      100      105      110
Leu Ala His Asn Ala Pro Val Lys Val Lys Asn Ala Gln Gly Trp Ser
      115      120      125
Pro Leu Ala Glu Ala Ile Ser Tyr Gly Asp Arg Gln Met Ile Thr Ala
      130      135      140
Leu Leu Arg Lys Leu Lys Gln Gln Ser Arg Glu Ser Val Glu Glu Lys
145      150      155      160
Arg Pro Arg Leu Leu Lys Ala Leu Lys Glu Leu Gly Asp Phe Tyr Leu
      165      170      175
Glu Leu His Trp Asp Phe Gln Ser Trp Val Pro Leu Leu Ser Arg Ile
      180      185      190
Leu Pro Ser Asp Ala Cys Lys Ile Tyr Lys Gln Gly Ile Asn Ile Arg
      195      200      205
Leu Asp Thr Thr Leu Ile Asp Phe Thr Asp Met Lys Cys Gln Arg Gly
      210      215      220
Asp Leu Ser Phe Ile Phe Asn Gly Asp Ala Ala Pro Ser Glu Ser Phe
225      230      235      240
Val Val Leu Asp Asn Glu Gln Lys Val Tyr Gln Arg Ile His His Glu
      245      250      255
Ala His Ile Pro Gly Ile Arg Asp Gly Asn Arg Arg Arg Gly Gly Tyr
      260      265      270
Phe Asn Glu Gln
      275

```

&lt;210&gt; 3451

&lt;211&gt; 595

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3451

```

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60
cgatcttcag ggtttacaga atgggtcctc cttaaagctct ctgagccccg gccgtaggta
120
gaaatattca gtaagtagtg ccctgccatt gcaggtttgg atgtccttct gccagcaaaa
180
cccagcatga acctctggct tgtggagatg tcttccagct ggaaacctga gtgagcgaag
240
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300
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360
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420
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480
tcattaactt cctctctggt gctatcttct gttgtgttgg tagctatgag cgctcccatc
540
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595

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&lt;210&gt; 3452

&lt;211&gt; 192

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3452

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Met Glu Ala Val Pro Leu Pro Ala Lys Glu Glu Arg Gly Met Gly Ala
 1             5             10             15
Leu Ile Ala Thr Asn Thr Thr Glu Asn Ser Thr Arg Glu Glu Val Asn
             20             25             30
Glu Arg Gln Ser His Pro Ala Thr Gln Gln Gln Leu Gly Lys Thr Leu
             35             40             45
Gln Ser Lys Gln Leu Pro Gln Val Pro Arg Pro Leu Gln Leu Phe Ser
             50             55             60
Ala Lys Glu Leu Arg Asp Ser Ser Ile Asp Thr His Gln Tyr His Glu
65             70             75             80
Gly Leu Ser Lys Ala Thr Gln Asp Gln Ile Leu Gln Thr Leu Ile Gln
             85             90             95
Arg Val Arg Arg Gln Asn Leu Leu Ser Val Val Pro Pro Ser Gln Phe
             100            105            110
Asn Phe Ala His Ser Gly Phe Gln Leu Glu Asp Ile Ser Thr Ser Gln
             115            120            125
Arg Phe Met Leu Gly Phe Ala Gly Arg Arg Thr Ser Lys Pro Ala Met
             130            135            140
Ala Gly His Tyr Leu Leu Asn Ile Ser Thr Tyr Gly Arg Gly Ser Glu
145            150            155            160
Ser Phe Arg Arg Thr His Ser Val Asn Pro Glu Asp Arg Phe Cys Leu
             165            170            175
Ser Ser Pro Thr Glu Ala Leu Lys Met Gly Tyr Thr Asn Cys Lys Asn
             180            185            190

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<210> 3453

<211> 477

<212> DNA

<213> Homo sapiens

<400> 3453

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120
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180
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240
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300
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360
agggcaaaaa ttgttatccg ggagctattg cctaattggg tgagagaatc gataagcaaa
420
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477

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<210> 3454

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3454

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Lys Met Ala Ala Ala Ala Ala Ala Gly Ala Ala Ser Gly Leu Pro Gly
          20          25          30
Pro Val Ala Gln Gly Leu Lys Glu Ala Leu Val Asp Thr Leu Thr Gly
          35          40          45
Ile Leu Ser Pro Val Gln Glu Val Arg Ala Ala Ala Glu Glu Gln Ile
          50          55          60
Lys Val Leu Glu Val Thr Glu Glu Phe Gly Val His Leu Ala Glu Leu
65          70          75          80
Thr Val Asp Pro Gln Gly Ala Leu Ala Ile Arg Gln Leu Ala Ser Val
          85          90          95
Ile Leu Lys Gln Tyr Val Glu Thr His Trp Cys Ala Gln Ser Glu Lys
          100         105         110
Phe Arg Pro Pro Glu Thr Thr Glu Arg Ala Lys Ile Val Ile Arg Glu
          115         120         125
Leu Leu Pro Asn Gly Leu Arg Glu Ser Ile Ser Lys Val Arg Ser Ser
          130         135         140
Val Ala Tyr Ala Val Ser Ala Ile Ala His Trp Asp Trp Pro Glu
145          150          155

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<210> 3455

<211> 4886

<212> DNA

<213> Homo sapiens

<400> 3455

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120
cttgctcggag actgagctat tggcagtgcc ttcagctctg agctcaggca cctcgaacat
180
tgtttttgtc gttaaggatc ctaaagtgtc gtggggagtg atcacatttt tctcaacatc
240
cctggcccca cctcttctgc cacaaacgtc agcatggtgg tatcagccgg ccctttgtcc
300
agcgagaagg cagagatgaa cattctagaa atcaatgaga aattgcgccc ccagttggca
360
gagaagaaac agcagttcag aaacctcaaa gagaaatgtt ttctaactca actggccggc
420
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480
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540
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600
agggagaagt tacgggaagg gagagatgcc tcccgtcat tgaatgagca tctccaggcc
660
ctcctcactc cggatgagcc ggacaagtcc caggggcagg acctccaaga acagctggct
720

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 4740  
 aatctataca attaaaagct tttgcctatc actctggact tttggattgt tttttacatt  
 4800  
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 4860  
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 4886

<210> 3456

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3456

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Lys	Lys	Gln	Arg	Arg	Arg	Gly	Arg	Lys	Glu	Gly	Glu	Glu	Asp	Gln	Asn
		20						25					30		
Pro	Pro	Cys	Pro	Arg	Leu	Asn	Gly	Val	Leu	Met	Glu	Val	Glu	Glu	Pro
		35					40					45			
Glu	Val	Leu	Gln	Asp	Ser	Leu	Asp	Arg	Cys	Tyr	Ser	Thr	Pro	Ser	Met
	50					55					60				
Tyr	Phe	Glu	Leu	Pro	Asp	Ser	Phe	Gln	His	Tyr	Arg	Ser	Val	Phe	Tyr
65					70					75				80	
Ser	Phe	Glu	Glu	Glu	His	Ile	Ser	Phe	Ala	Leu	Tyr	Val	Asp	Asn	Arg
			85					90					95		
Phe	Phe	Thr	Leu	Thr	Val	Thr	Ser	Leu	His	Leu	Val	Phe	Gln	Met	Gly
			100					105					110		
Val	Ile	Phe	Pro	Gln											

115

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<211> 646  
<212> DNA  
<213> Homo sapiens

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180  
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240  
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300  
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420  
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480  
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540  
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646

<210> 3458  
<211> 61  
<212> PRT  
<213> Homo sapiens

<400> 3458  
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35 40 45  
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50 55 60

<210> 3459  
<211> 592  
<212> DNA  
<213> Homo sapiens

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240  
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300  
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360  
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420  
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592

&lt;210&gt; 3460

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3460

Met	Gly	Pro	Ser	Gly	Pro	Ala	Ala	Thr	Pro	Thr	Thr	Trp	Asp	Leu	Pro
1				5					10					15	
Ser	Gly	Pro	Ala	Arg	Ile	Pro	Val	Leu	Pro	Cys	Ser	Pro	Gln	Leu	Pro
			20					25					30		
Gly	Pro	Ser	Leu	Cys	Ala	Ala	Ser	Val	Cys	Leu	Leu	Gln	Asn	Lys	His
		35					40					45			
His	Ala	Pro	Ser	Trp	Ala	Glu	Ala	Pro	Ala	Asp	Ser	Pro	Arg	Ala	Leu
	50					55				60					
Gln	Ala	Cys	Pro	Val	Leu	Cys	Gln	Ala	Gly	Pro	Gly	His	Val	Pro	Ala
65				70					75					80	
Pro	Gly	Ala	Gly	Leu	Gln	Arg	Gly	Gln	Trp	Ser	Ala	Leu	Lys	Thr	Val
			85					90					95		
Ile	Pro	Ala	Arg	Pro	Ala	Leu	Pro	Cys	Ser	Ala	Arg	Gly	Gln	Phe	Glu
			100					105					110		
Leu	Lys	Leu													
			115												

&lt;210&gt; 3461

&lt;211&gt; 474

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3461

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120  
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180

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474

&lt;210&gt; 3462

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3462

Met	Ala	Leu	Leu	Glu	Ala	Ser	Ile	Gly	Val	Ala	Gly	Met	Leu	Ala	Ser
1				5				10					15		
Leu	Leu	Gly	Gly	His	Trp	Leu	Arg	Ala	Gln	Gly	Tyr	Ala	Asn	Pro	Phe
		20						25					30		
Trp	Leu	Ala	Leu	Ala	Leu	Leu	Ile	Ala	Met	Thr	Leu	Tyr	Ala	Ala	Phe
		35					40					45			
Cys	Phe	Gly	Glu	Thr	Leu	Lys	Glu	Pro	Lys	Ser	Thr	Arg	Leu	Phe	Thr
	50					55					60				
Phe	Arg	His	His	Arg	Ser	Ile	Val	Gln	Leu	Tyr	Val	Ala	Pro	Ala	Pro
65					70					75				80	
Glu	Lys	Ser	Arg	Lys	His	Leu	Ala	Leu	Tyr	Ser	Leu	Ala	Ile	Phe	Val
				85				90						95	
Val	Ile	Thr	Val	His											
				100											

&lt;210&gt; 3463

&lt;211&gt; 1734

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3463

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420  
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 1734

&lt;210&gt; 3464

&lt;211&gt; 434

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3464

Xaa	Arg	Arg	Arg	Leu	Arg	Ser	Ala	Pro	Ala	Ala	Ala	Ala	Ala	Ala	Leu
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Leu	Glu	Asp	Pro	Ala	Val	Pro	Arg	Leu	Thr	Ala	Ala	Leu	Pro	Ala	Ala
			20					25					30		
Glu	Leu	Pro	Glu	Arg	Arg	Arg	Arg	Gln	Gln	Arg	Gln	Gly	Lys	His	His

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<210> 3465
<211> 2904
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3465

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2904

&lt;210&gt; 3466

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3466

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Ala Leu Ile Arg Ser Pro Ser Leu Ala Lys Gln Ser Trp Gly Gly Gly
          20           25           30
Gly Arg His Arg Lys Leu Pro Glu Asn Trp Thr Asp Thr Arg Glu Thr
          35           40           45
Leu Leu Glu Gly Met Leu Phe Ser Leu Lys Tyr Leu Gly Met Thr Leu
          50           55           60
Val Glu Gln Pro Lys Gly Glu Glu Leu Ser Ala Ala Ala Ile Lys Arg
65           70           75           80
Ile Val Ala Thr Ala Lys Ala Ser Gly Lys Lys Leu Gln Lys Val Thr
          85           90           95
Leu Lys Val Ser Pro Arg Gly Ile Ile Leu Thr Asp Asn Leu Thr Asn
          100          105          110
Gln Leu Ile Glu Asn Val Ser Ile Tyr Arg Ile Ser Tyr Cys Thr Ala
          115          120          125
Asp Lys Met His Asp Lys Val Phe Ala Tyr Ile Ala Gln Ser Gln His
          130          135          140
Asn Gln Ser Leu Glu Cys His Ala Phe Leu Cys Thr Lys Arg Lys Met
145          150          155          160
Ala Gln Ala Val Thr Leu Thr Val Ala Gln Ala Phe Lys Val Ala Phe
          165          170          175
Glu Phe Trp Gln Val Ser Lys Glu Glu Lys Glu Lys Arg Asp Lys Ala
          180          185          190
Ser Gln Glu Gly Gly Asp Val Leu Gly Ala Arg Gln Asp Cys Thr Pro
          195          200          205
Pro Leu Lys Ser Leu Val Ala Thr Gly Asn Leu Leu Asp Leu Glu Glu
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Thr Ala Lys Ala Pro Leu Ser Thr Val Ser Ala Asn Thr Thr Asn Met
225          230          235          240
Asp Glu Val Pro Arg Pro Gln Ala Leu Ser Gly Ser Ser Val Val Trp
          245          250          255
Glu Leu Asp Asp Gly Leu Asp Glu Ala Phe Ser Arg Leu Ala Gln Ser
          260          265          270
Arg Thr Asn Pro Gln Val Leu Asp Thr Gly Leu Thr Ala Gln Asp Met
          275          280          285
His Tyr Ala Gln Cys Leu Ser Pro Val Asp Trp Asp Lys Pro Asp Ser
          290          295          300
Ser Gly Thr Glu Gln Asp Asp Leu Phe Ser Phe
305          310          315

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&lt;210&gt; 3467

&lt;211&gt; 638

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3467

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 638

<210> 3468  
 <211> 88  
 <212> PRT  
 <213> Homo sapiens

<400> 3468  
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 Trp Leu Cys Tyr Thr Ser Cys Tyr Gln Gln Asn Arg Val Ser Leu Gly  
 35 40 45  
 Gln Ser Cys Gly Tyr Thr Ser Val Ser Gln Asp Phe Leu Cys Gln Arg  
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<210> 3469  
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 <212> DNA  
 <213> Homo sapiens

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1680  
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1710

&lt;210&gt; 3470

&lt;211&gt; 322

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3470

Ala Ala Ala Pro Gly Asn Gly Arg Ala Ser Ala Pro Arg Leu Leu Leu

1				5				10					15			
Leu	Phe	Leu	Val	Pro	Leu	Leu	Trp	Ala	Pro	Ala	Ala	Val	Arg	Ala	Gly	
			20					25					30			
Pro	Asp	Glu	Asp	Leu	Ser	His	Arg	Asn	Lys	Glu	Pro	Pro	Ala	Pro	Ala	
		35					40					45				
Gln	Gln	Leu	Gln	Pro	Gln	Pro	Val	Ala	Val	Gln	Gly	Pro	Glu	Pro	Ala	
	50					55				60						
Arg	Val	Glu	Lys	Ile	Phe	Thr	Pro	Ala	Ala	Pro	Val	His	Thr	Asn	Lys	
65				70						75				80		
Glu	Asp	Pro	Ala	Thr	Gln	Thr	Asn	Leu	Gly	Phe	Ile	His	Ala	Phe	Val	
			85					90				95				
Ala	Ala	Ile	Ser	Val	Ile	Ile	Val	Ser	Glu	Leu	Gly	Asp	Lys	Thr	Phe	
		100						105				110				
Phe	Ile	Ala	Ala	Ile	Met	Ala	Met	Arg	Tyr	Asn	Arg	Leu	Thr	Val	Leu	
	115						120				125					
Ala	Gly	Ala	Met	Leu	Ala	Leu	Gly	Leu	Met	Thr	Cys	Leu	Ser	Val	Leu	
	130					135					140					
Phe	Gly	Tyr	Ala	Thr	Thr	Val	Ile	Pro	Arg	Val	Tyr	Thr	Tyr	Tyr	Val	
145				150					155						160	
Ser	Thr	Val	Leu	Phe	Ala	Ile	Phe	Gly	Ile	Arg	Met	Leu	Arg	Glu	Gly	
			165					170				175				
Leu	Lys	Met	Ser	Pro	Asp	Glu	Gly	Gln	Glu	Glu	Leu	Glu	Glu	Val	Gln	
		180					185					190				
Ala	Glu	Leu	Lys	Lys	Lys	Asp	Glu	Glu	Phe	Gln	Arg	Thr	Lys	Leu	Leu	
	195						200					205				
Asn	Gly	Pro	Gly	Asp	Val	Glu	Thr	Gly	Thr	Ser	Ile	Thr	Val	Pro	Gln	
	210					215					220					
Lys	Lys	Trp	Leu	His	Phe	Ile	Ser	Pro	Ile	Phe	Val	Gln	Ala	Leu	Thr	
225				230						235					240	
Leu	Thr	Phe	Leu	Ala	Glu	Trp	Gly	Asp	Arg	Ser	Gln	Leu	Thr	Thr	Ile	
			245					250						255		
Val	Leu	Ala	Ala	Arg	Glu	Asp	Pro	Tyr	Gly	Val	Ala	Val	Gly	Gly	Thr	
		260						265					270			
Val	Gly	His	Cys	Leu	Cys	Thr	Gly	Leu	Ala	Val	Ile	Gly	Gly	Arg	Met	
	275						280					285				
Ile	Ala	Gln	Lys	Ile	Ser	Val	Arg	Thr	Val	Thr	Ile	Ile	Gly	Gly	Ile	
	290					295					300					
Val	Phe	Leu	Ala	Phe	Ala	Phe	Ser	Ala	Leu	Phe	Ile	Ser	Pro	Asp	Ser	
305				310					315						320	
Gly	Phe															

&lt;210&gt; 3471

&lt;211&gt; 2335

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3471

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<210> 3472

<211> 631

<212> PRT

<213> Homo sapiens

<400> 3472

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			20						25				30		
Lys	Val	Cys	Val	Ser	Val	Val	Ser	Glu	Lys	Cys	Arg	Ile	Asp	Thr	Glu
		35					40					45			
Ile	Leu	Pro	Ser	Leu	Phe	Met	Arg	Cys	Thr	Thr	Asp	Leu	Asn	Arg	Lys
	50					55					60				
Asp	Lys	Phe	Pro	Ala	Ile	Thr	His	Leu	Lys	Phe	Leu	Ala	Arg	Asp	Met
65					70					75				80	
Ser	Glu	Gln	Val	Leu	Leu	Cys	Ala	Ser	Ser	Gln	Thr	Ser	Ser	Ile	Val
			85						90					95	
Glu	Cys	Trp	Ser	Leu	Arg	Lys	Glu	Gly	Leu	Pro	Val	Asn	Asn	Ile	Phe
			100					105					110		
Gln	Gln	Ile	Ser	Pro	Val	Val	Gly	Asp	Lys	Gln	Pro	Thr	Ile	Leu	Lys
		115					120					125			
Trp	Arg	Ile	Leu	Ser	Ala	Thr	Asn	Asp	Leu	Asp	Arg	Val	Ser	Ala	Val
	130					135					140				
Ala	Leu	Pro	Lys	Leu	Pro	Ile	Ser	Leu	Thr	Asn	Thr	Asp	Leu	Lys	Val
145					150					155				160	
Ala	Ser	Asp	Thr	Gln	Phe	Tyr	Pro	Gly	Leu	Gly	Leu	Ala	Leu	Ala	Phe
			165					170					175		
His	Asp	Gly	Ser	Val	His	Ile	Val	His	Arg	Leu	Ser	Leu	Gln	Thr	Met
		180						185				190			
Ala	Val	Phe	Tyr	Ser	Ser	Ala	Ala	Pro	Arg	Pro	Val	Asp	Glu	Pro	Ala
	195						200					205			
Met	Lys	Arg	Pro	Arg	Thr	Ala	Gly	Pro	Ala	Val	His	Leu	Lys	Ala	Met
210						215					220				
Gln	Leu	Ser	Trp	Thr	Ser	Leu	Ala	Leu	Val	Gly	Ile	Asp	Ser	His	Gly



<210> 3473  
<211> 1660

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3473

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600  
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660  
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1260  
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1380  
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 1560  
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<210> 3474

<211> 474

<212> PRT

<213> Homo sapiens

<400> 3474

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Ile	Ser	Gly	Leu	Leu	Leu	Cys	Arg	Trp	Thr	Cys	Arg	His	Cys	Cys	Gln
		20						25					30		
Lys	Cys	Tyr	Glu	Ser	Ser	Cys	Cys	Gln	Ser	Ser	Glu	Asp	Glu	Val	Glu
		35					40					45			
Ile	Leu	Gly	Pro	Phe	Pro	Ala	Gln	Thr	Pro	Pro	Trp	Leu	Met	Ala	Ser
	50					55					60				
Arg	Ser	Ser	Asp	Lys	Asp	Gly	Asp	Ser	Val	His	Thr	Ala	Ser	Glu	Val
65				70					75					80	
Pro	Leu	Thr	Pro	Arg	Thr	Asn	Ser	Pro	Asp	Gly	Arg	Arg	Ser	Ser	Ser
			85					90					95		
Asp	Thr	Ser	Lys	Ser	Thr	Tyr	Ser	Leu	Thr	Arg	Arg	Ile	Ser	Ser	Leu
		100						105					110		
Glu	Ser	Arg	Arg	Pro	Ser	Ser	Pro	Leu	Ile	Asp	Ile	Lys	Pro	Ile	Glu
	115						120					125			
Phe	Gly	Val	Leu	Ser	Ala	Lys	Lys	Glu	Pro	Ile	Gln	Pro	Ser	Val	Leu
	130					135					140				
Arg	Arg	Thr	Tyr	Asn	Pro	Asp	Asp	Tyr	Phe	Arg	Lys	Phe	Glu	Pro	His
145				150					155					160	
Leu	Tyr	Ser	Leu	Asp	Ser	Asn	Ser	Asp	Asp	Val	Asp	Ser	Leu	Thr	Asp
			165					170					175		
Glu	Glu	Ile	Leu	Ser	Lys	Tyr	Gln	Leu	Gly	Met	Leu	His	Phe	Ser	Thr
		180						185					190		
Gln	Tyr	Asp	Leu	Leu	His	Asn	His	Leu	Thr	Val	Arg	Val	Ile	Glu	Ala
	195					200						205			
Arg	Asp	Leu	Pro	Pro	Pro	Ile	Ser	His	Asp	Gly	Ser	Arg	Gln	Asp	Met
	210					215					220				
Ala	His	Ser	Asn	Pro	Tyr	Val	Lys	Ile	Cys	Leu	Leu	Pro	Asp	Gln	Lys
225				230					235					240	
Asn	Ser	Lys	Gln	Thr	Gly	Val	Lys	Arg	Lys	Thr	Gln	Lys	Pro	Val	Phe
			245					250					255		
Glu	Glu	Arg	Tyr	Thr	Phe	Glu	Ile	Pro	Phe	Leu	Glu	Ala	Gln	Arg	Arg
		260					265						270		
Thr	Leu	Leu	Leu	Thr	Val	Val	Asp	Phe	Asp	Lys	Phe	Ser	Arg	His	Cys
	275						280					285			
Val	Ile	Gly	Lys	Val	Ser	Val	Pro	Leu	Cys	Glu	Val	Asp	Leu	Val	Lys
	290					295					300				
Gly	Gly	His	Trp	Trp	Lys	Ala	Leu	Ile	Pro	Ser	Ser	Gln	Asn	Glu	Val
305				310					315					320	
Glu	Leu	Gly	Glu	Leu	Leu	Leu	Ser	Leu	Asn	Tyr	Leu	Pro	Ser	Ala	Gly

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<400> 3476
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Trp Leu Val Leu Gln Pro Phe Phe Tyr Ser Leu Arg Pro Leu Cys Val
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                20                25                30
His Pro Lys Ala Val Thr Arg Met Glu Val Leu Asn Thr Leu Val Gln
                35                40                45
Leu Ala Ala Asp Leu Ala Ile Phe Ala Leu Trp Gly Leu Lys Pro Val
                50                55                60
Val Tyr Leu Leu Ala Ser Ser Phe Leu Gly Leu Gly Leu His Pro Ile
65                70                75                80
Ser Gly His Phe Val Ala Glu His Tyr Met Phe Leu Lys Gly His Glu
                85                90                95
Thr Tyr Ser Tyr Tyr Gly Pro Leu Asn Trp Ile Thr Phe Asn Val Gly
                100                105                110
Tyr His Val Glu His His Asp Phe Pro Ser Ile Pro Gly Tyr Asn Leu
                115                120                125
Pro Leu Val Arg Lys Ile Ala Pro Glu Tyr Tyr Asp His Leu Pro Gln
                130                135                140
His His Ser Trp Val Lys Val Leu Trp Asp Phe Val Phe Glu Asp Ser
145                150                155                160
Leu Gly Pro Tyr Ala Arg Val Lys Arg Val Tyr
                165                170

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&lt;210&gt; 3477

&lt;211&gt; 356

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3477

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356

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&lt;210&gt; 3478

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3478

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Met Ile Arg Met Pro Ser Arg Lys Asn His Pro Leu Pro Val Phe Ser
1                5                10                15
Leu Ala Val Arg Val Gly Lys Trp Arg Arg His Leu Thr Ile Thr Leu
                20                25                30
Ser Gly Asp Lys Asp Lys Gly Leu Pro Glu Thr Ser Val Val Arg Thr
35                40                45
Ser Lys His Lys Lys Asn Ala Tyr Leu Leu Val Pro Leu Cys His Ile
50                55                60
Trp Ser His Leu Ser Gly Ser Lys Val Lys Gly His Phe Leu Lys Phe

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65		70		75		80									
Phe	Leu	Leu	Phe	Ile	Lys	Ser	His	Gly	Arg	Val	Asp	Ala	Gly	Gly	Gln
			85					90						95	
Ala	Pro	Val	Ala	Gly	Leu	Asp	Glu	Asp	Pro	Glu	Thr	Ala	Gly	Gln	Ala
		100					105						110		
Ala	Glu	Ala	Arg												
		115													

&lt;210&gt; 3479

&lt;211&gt; 797

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3479

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780
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797

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&lt;210&gt; 3480

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3480

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Asn	Leu	Arg	Arg	Tyr	Pro	Gly	Ser	Asp	Arg	Ile	Met	Leu	Gln	Lys	Trp
		20					25					30			
Gln	Lys	Arg	Asp	Ile	Ser	Asn	Phe	Glu	Tyr	Leu	Met	Tyr	Leu	Asn	Thr

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180
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360
caatgccatg aggtcctgac cagaggggtct tctgccaatg cctccaagtg gtcaccacct
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cagaactata agaagcgtgt ggcagccttg gaagccaagc aaaagcccag cacttcccag
480
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720
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780
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840
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&lt;210&gt; 3482

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3482

Met	Pro	Pro	Ser	Gly	His	His	Leu	Ser	Ser	Ala	Asp	Pro	Ala	Val	Leu
1				5				10						15	
Gly	Ala	Thr	Met	Glu	Ser	Arg	Cys	Tyr	Gly	Cys	Ala	Val	Lys	Phe	Thr
			20					25					30		
Leu	Phe	Lys	Lys	Glu	Tyr	Gly	Cys	Lys	Asn	Cys	Gly	Arg	Xaa	Phe	Cys
		35					40					45			
Ser	Gly	Cys	Leu	Ser	Phe	Ser	Ala	Ala	Val	Pro	Arg	Thr	Gly	Asn	Thr
	50					55					60				
Gln	Gln	Lys	Val	Cys	Lys	Gln	Cys	His	Glu	Val	Leu	Thr	Arg	Gly	Ser
65					70				75					80	
Ser	Ala	Asn	Ala	Ser	Lys	Trp	Ser	Pro	Pro	Gln	Asn	Tyr	Lys	Lys	Arg
			85					90					95		
Val	Ala	Ala	Leu	Glu	Ala	Lys	Gln	Lys	Pro	Ser	Thr	Ser	Gln	Ser	Gln
			100					105					110		
Gly	Leu	Thr	Arg	Gln	Asp	Gln	Met	Ile	Ala	Glu	Arg	Leu	Ala	Arg	Leu



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      115      120      125
Arg Gln Glu Asn Lys Pro Lys Leu Val Pro Ser Gln Ala Glu Ile Glu
      130      135      140
Ala Arg Leu Ala Ala Leu Lys Asp Glu Arg Gln Gly Ser Ile Pro Ser
145      150      155      160
Thr Gln Glu Met Glu Ala Arg Leu Ala Ala Leu Gln Gly Arg Val Leu
      165      170      175
Pro Ser Gln Thr Pro Gln Pro Gly Thr Ser His Thr Gly His Gln Asp
      180      185      190
Pro Ser Pro Ala Asp Thr Gly Ser Ala Asn Ala Ala Gly Ser
      195      200      205

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&lt;210&gt; 3483

&lt;211&gt; 477

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3483

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360
gccgtgttcg ccaacctgcc cgtgggtgtg ccctacgccg cctccttcaa gaagtaccac
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477

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&lt;210&gt; 3484

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3484

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Met Gly Asn Ser Ala Ser Arg Asn Asp Phe Glu Trp Val Tyr Thr Asp
  1      5      10      15
Gln Pro His Thr Gln Arg Arg Lys Glu Ile Leu Ala Lys Tyr Pro Ala
      20      25      30
Ile Lys Ala Leu Met Arg Pro Asp Pro Arg Leu Lys Trp Ala Gly Leu
      35      40      45
Val Leu Val Leu Val Gln Met Leu Ala Cys Trp Leu Val Arg Gly Leu
      50      55      60
Ala Trp Arg Trp Leu Leu Phe Trp Ala Tyr Ala Phe Gly Gly Cys Val
      65      70      75      80
Asn His Ser Leu Thr Leu Ala Ile His Asp Ile Ser His Asn Ala Ala
      85      90      95
Phe Gly Thr Gly Arg Ala Ala Arg Asn Arg Trp Leu Ala Val Phe Ala

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100 105 110  
 Asn Leu Pro Val Gly Val Pro Tyr Ala Ala Ser Phe Lys Lys Tyr His  
 115 120 125  
 Val Asp His His Arg Tyr Leu Gly Gly Asp Gly Leu Asp Val Asp Val  
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 Pro Thr Arg  
 145

<210> 3485  
 <211> 812  
 <212> DNA  
 <213> Homo sapiens

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 120  
 gtctaaaaaa tcttattgtt ctcagggttag cagtttagttg agcagagtc attggtgaag  
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 caatctagtt attggcaaat tctaacacat ggtaagggtgt gggggaaagg atttaaaata  
 240  
 acagaaaaat gtaagtacaa acatacataa cagcaaaata aaactcactt taacaaaaat  
 300  
 ttatttaaaa tgttaccccc atatttcctc aatgaccaac ttgtttcagt tttatctccc  
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 cctcatccgg ttattttatg tctttttggg aggaagggag atgaggggtt ttgtttttta  
 420  
 acaaaatcac tggcttttta aaaagtgtta ctgcagtcatt ttataagatg catgttatgt  
 480  
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 atgagtccag aaaaaaatcc ttcaggaacc ttcaagattg aagaaagaac ttcttttaac  
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 660  
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 720  
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<210> 3486  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 3486  
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 Ile Pro Leu Ser Gly Arg Leu Asp Ser Asp Glu Gln Lys Ile Gln Asn  
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 Asp Ile Ile Asp Ile Leu Leu Thr Phe Thr Gln Gly Val Asn Glu Lys

35 40 45  
 Leu Thr Ile Ser Glu Glu Thr Leu Ala Asn Asn Thr Trp Ser Leu Met  
 50 55 60  
 Leu Lys Glu Val Leu Ser Ser Ile Leu Lys Val Pro Glu Gly Phe Phe  
 65 70 75 80  
 Ser Gly Leu Ile Leu Leu Ser Glu Leu Leu Pro Leu Pro Leu Pro Met  
 85 90 95  
 Gln Thr Thr Gln Val Ser Leu Pro His Asn Met His Leu Ile Asn Asp  
 100 105 110  
 Cys Ser Asn Thr Phe  
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<210> 3487  
 <211> 772  
 <212> DNA  
 <213> Homo sapiens

<400> 3487  
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 taaatttggt tttcagtgaa atatcctcaa tagcaatttt accaaagagg ccttcttctg  
 240  
 aaggccacct ctgaaataat tagaggataa atgtcaatgg catgatatta agatattact  
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 360  
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 420  
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 480  
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 540  
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 aacagacctt atcaccaact ctactatagt tataaacata ccaatagttt aacatttagt  
 660  
 tgtaatcat gaaacatttt gatTTTTTaa aaattttaac tacagtcaac cttaatttca  
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<210> 3488  
 <211> 59  
 <212> PRT  
 <213> Homo sapiens

<400> 3488  
 Asp Ile Thr Trp Pro Gly Val Val Val Thr Arg Val Ile Pro Ala Leu  
 1 5 10 15  
 Trp Glu Ala Glu Ala Gly Gly Ser Arg Gly Gln Glu Ile Glu Thr Ser



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568

<210> 3492  
<211> 189  
<212> PRT  
<213> Homo sapiens

<400> 3492  
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Ile Ala Val Ala Asp Lys Asp Ser Ile Cys Phe Trp Asp Trp Glu Lys  
20 25 30  
Gly Glu Lys Leu Asp Tyr Phe His Asn Gly Asn Pro Arg Tyr Thr Arg  
35 40 45  
Val Thr Ala Met Glu Tyr Leu Asn Gly Gln Asp Cys Ser Leu Leu Leu  
50 55 60  
Thr Ala Thr Asp Asp Gly Ala Ile Arg Val Trp Lys Asn Phe Ala Asp  
65 70 75 80  
Leu Glu Lys Asn Pro Glu Met Val Thr Ala Trp Gln Gly Leu Ser Asp  
85 90 95  
Met Leu Pro Thr Thr Arg Gly Ala Gly Met Val Val Asp Trp Glu Gln  
100 105 110  
Glu Thr Gly Leu Leu Met Ser Ser Gly Asp Val Arg Ile Val Arg Ile  
115 120 125  
Trp Asp Thr Asp Arg Glu Met Lys Val Gln Asp Ile Pro Thr Gly Ala  
130 135 140  
Asp Ser Cys Val Thr Ser Leu Ser Cys Asp Ser His Arg Ser Leu Ile  
145 150 155 160  
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165 170 175  
Ala Leu Ser Glu Cys Arg Val Met Thr Tyr Arg Glu His  
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<210> 3493  
<211> 2244  
<212> DNA  
<213> Homo sapiens

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<210> 3494
<211> 628
<212> PRT
<213> Homo sapiens
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			20					25					30			
Ala	Ser	His	His	Ser	Gly	Ser	Asp	Asn	His	Ser	Glu	Arg	Ser	Asp	Asn	
		35					40					45				
Arg	Ser	Glu	Ala	Ser	Glu	Arg	Ser	Asp	His	Glu	Asp	Asn	Asp	Pro	Ser	
	50					55					60					
Asp	Val	Asp	Gln	His	Ser	Gly	Ser	Glu	Ala	Pro	Asn	Asp	Asp	Glu	Asp	
65					70					75					80	
Glu	Gly	His	Arg	Ser	Asp	Gly	Gly	Ser	His	His	Ser	Glu	Ala	Glu	Gly	
				85				90						95		
Ser	Glu	Lys	Ala	His	Ser	Asp	Asp	Glu	Lys	Trp	Gly	Arg	Glu	Asp	Lys	
			100					105					110			
Ser	Asp	Gln	Ser	Asp	Asp	Glu	Lys	Ile	Gln	Asn	Ser	Asp	Asp	Glu	Glu	
		115					120					125				
Arg	Ala	Gln	Gly	Ser	Asp	Glu	Asp	Lys	Leu	Gln	Asn	Ser	Asp	Asp	Asp	
	130					135						140				
Glu	Lys	Met	Gln	Asn	Thr	Asp	Asp	Glu	Glu	Arg	Pro	Gln	Leu	Ser	Asp	
145					150					155					160	
Asp	Glu	Arg	Gln	Gln	Leu	Ser	Glu	Glu	Glu	Lys	Ala	Asn	Ser	Asp	Asp	
				165				170						175		
Glu	Arg	Pro	Val	Ala	Ser	Asp	Asn	Asp	Asp	Glu	Lys	Gln	Asn	Ser	Asp	
			180					185					190			
Asp	Glu	Glu	Gln	Pro	Gln	Leu	Ser	Asp	Glu	Glu	Lys	Met	Gln	Asn	Ser	
		195					200					205				
Asp	Asp	Glu	Arg	Pro	Gln	Ala	Pro	Asp	Glu	Glu	His	Arg	His	Ser	Asp	

210	215	220
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225	230	235
Ser Glu Asp Glu Val	Leu Arg Met Lys Arg	Lys Asn Ala Ile Ala Ser
245	250	255
Asp Ser Glu Ala Asp	Ser Asp Thr Glu Val	Pro Lys Asp Asn Ser Gly
260	265	270
Thr Met Asp Leu Phe	Gly Gly Ala Asp Asp	Ile Ser Ser Gly Ser Asp
275	280	285
Gly Glu Asp Lys Pro	Pro Thr Pro Gly Gln	Pro Val Asp Glu Asn Gly
290	295	300
Leu Pro Gln Asp Gln	Gln Glu Glu Glu Pro	Ile Pro Glu Thr Arg Ile
305	310	315
Glu Val Glu Ile Pro	Lys Val Asn Thr Asp	Leu Gly Asn Asp Leu Tyr
325	330	335
Phe Val Lys Leu Pro	Asn Phe Leu Ser Val	Glu Pro Arg Pro Phe Asp
340	345	350
Pro Gln Tyr Tyr Glu	Asp Glu Phe Glu Asp	Glu Glu Met Leu Asp Glu
355	360	365
Glu Gly Arg Thr Arg	Leu Lys Leu Lys Val	Glu Asn Thr Ile Arg Trp
370	375	380
Arg Ile Arg Arg Asp	Glu Glu Gly Asn Glu	Ile Lys Glu Ser Asn Ala
385	390	395
Arg Ile Val Lys Trp	Ser Asp Gly Ser Met	Ser Leu His Leu Gly Asn
405	410	415
Glu Val Phe Asp Val	Tyr Lys Ala Pro Leu	Gln Gly Asp His Asn His
420	425	430
Leu Phe Ile Arg Gln	Gly Thr Gly Leu Gln	Gly Gln Ala Val Phe Lys
435	440	445
Ala Lys Leu Thr Phe	Arg Pro His Ser Thr	Asp Ser Ala Thr His Arg
450	455	460
Lys Met Thr Leu Ser	Leu Ala Asp Arg Cys	Ser Lys Thr Gln Lys Ile
465	470	475
Arg Ile Leu Pro Met	Ala Gly Arg Asp Pro	Glu Cys Gln Arg Thr Glu
485	490	495
Met Ile Lys Lys Glu	Glu Glu Arg Leu Arg	Ala Ser Ile Arg Arg Glu
500	505	510
Ser Gln Gln Arg Arg	Met Arg Glu Lys Gln	His Gln Arg Gly Leu Ser
515	520	525
Ala Ser Tyr Leu Glu	Pro Asp Arg Tyr Asp	Glu Glu Glu Glu Gly Glu
530	535	540
Glu Ser Ile Ser Leu	Ala Ala Ile Lys Asn	Arg Tyr Lys Gly Gly Ile
545	550	555
Arg Glu Glu Arg Ala	Arg Ile Tyr Ser Ser	Asp Ser Asp Glu Gly Ser
565	570	575
Glu Glu Asp Lys Ala	Gln Arg Leu Leu Lys	Ala Lys Lys Leu Thr Ser
580	585	590
Asp Glu Glu Gly Glu	Pro Ser Gly Lys Arg	Lys Ala Glu Asp Asp Asp
595	600	605
Lys Ala Asn Lys Lys	His Lys Lys Tyr Val	Ile Ser Asp Glu Glu Glu
610	615	620
Glu Asp Asp Asp		
625		



<210> 3495  
<211> 1085  
<212> DNA  
<213> Homo sapiens

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120  
gcgtccccgg aggagatcaa gaaggcctat cggaagctgg cgctcaagta ccaccggac  
180  
aagaaccgg atgagggcga gaagtttaaa ctcatatccc aggcataatga agtgctttca  
240  
gatccaaaga aaagggatgt ttatgaccaa ggcggagagc aggcaattaa agaaggaggc  
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420  
gaagatctat ataatggagt cacgaagaaa ttggccctcc agaaaaatgt aatttgtgag  
480  
aaatgtgaag gtgttggtgg gaagaaggga tcggtggaga agtgcccgct gtgcaagggg  
540  
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780  
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840  
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900  
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960  
aagcacgggg acctgagatg cgtgagcgat gaaggaatgc ccatctacaa agcaccctg  
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1080  
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1085

<210> 3496  
<211> 337  
<212> PRT  
<213> Homo sapiens

<400> 3496  
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Ala Ser Pro Glu Glu Ile Lys Lys Ala Tyr Arg Lys Leu Ala Leu Lys

20 25 30  
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 35 40 45  
 Ser Gln Ala Tyr Glu Val Leu Ser Asp Pro Lys Lys Arg Asp Val Tyr  
 50 55 60  
 Asp Gln Gly Gly Glu Gln Ala Ile Lys Glu Gly Gly Ser Gly Ser Pro  
 65 70 75 80  
 Ser Phe Ser Ser Pro Met Asp Ile Phe Asp Met Phe Phe Gly Gly Gly  
 85 90 95  
 Gly Arg Met Ala Arg Glu Arg Arg Gly Lys Asn Val Val His Gln Leu  
 100 105 110  
 Ser Val Thr Leu Glu Asp Leu Tyr Asn Gly Val Thr Lys Lys Leu Ala  
 115 120 125  
 Leu Gln Lys Asn Val Ile Cys Glu Lys Cys Glu Gly Val Gly Gly Lys  
 130 135 140  
 Lys Gly Ser Val Glu Lys Cys Pro Leu Cys Lys Gly Arg Gly Met Gln  
 145 150 155 160  
 Ile His Ile Gln Gln Ile Gly Pro Gly Met Val Gln Gln Ile Gln Thr  
 165 170 175  
 Val Cys Ile Glu Cys Lys Gly Gln Gly Glu Arg Ile Asn Pro Lys Asp  
 180 185 190  
 Arg Cys Glu Ser Cys Ser Gly Ala Lys Val Ile Arg Glu Lys Lys Ile  
 195 200 205  
 Ile Glu Val His Val Glu Lys Gly Met Lys Asp Gly Gln Lys Ile Leu  
 210 215 220  
 Phe His Gly Glu Gly Asp Gln Glu Pro Glu Leu Glu Pro Gly Asp Val  
 225 230 235 240  
 Ile Ile Val Leu Asp Gln Lys Asp His Ser Val Phe Gln Arg Arg Gly  
 245 250 255  
 His Asp Leu Ile Met Lys Met Lys Ile Gln Leu Ser Glu Ala Leu Cys  
 260 265 270  
 Gly Phe Lys Lys Thr Ile Lys Thr Leu Asp Asn Arg Ile Leu Val Ile  
 275 280 285  
 Thr Ser Lys Ala Gly Glu Val Ile Lys His Gly Asp Leu Arg Cys Val  
 290 295 300  
 Arg Asp Glu Gly Met Pro Ile Tyr Lys Ala Pro Leu Glu Lys Gly Ile  
 305 310 315 320  
 Leu Ile Ile Gln Phe Leu Val Ile Phe Pro Xaa Lys His Trp Leu Ser  
 325 330 335  
 Leu

&lt;210&gt; 3497

&lt;211&gt; 1638

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3497

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120

tttttagtat atccttctaa aaagttttcc tgagaatttt tagtttgccc tctcaagttt  
180

ccttatttta ctttttctta aattacctcc ctcttcctt agtgaaatga gccttccttc  
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1638

&lt;210&gt; 3498

&lt;211&gt; 210

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3498

Met Arg Lys Arg Gln Gln Ser Gln Asn Glu Gly Thr Pro Ala Val Ser  
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 Gln Ala Pro Gly Asn Gln Arg Pro Asn Asn Thr Cys Cys Phe Cys Trp  
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 Cys Cys Cys Cys Ser Cys Ser Cys Leu Thr Val Arg Asn Glu Glu Arg  
 35 40 45  
 Gly Glu Asn Ala Gly Arg Pro Thr His Thr Thr Lys Met Glu Ser Ile  
 50 55 60  
 Gln Val Leu Glu Glu Cys Gln Asn Pro Thr Ala Glu Glu Val Leu Ser  
 65 70 75 80  
 Trp Ser Gln Asn Phe Asp Lys Met Met Lys Ala Pro Ala Gly Arg Asn  
 85 90 95  
 Leu Phe Arg Glu Phe Leu Arg Thr Glu Tyr Ser Glu Glu Asn Leu Leu  
 100 105 110  
 Phe Trp Leu Ala Cys Glu Asp Leu Lys Lys Glu Gln Asn Lys Lys Val  
 115 120 125  
 Ile Glu Glu Lys Ala Arg Met Ile Tyr Glu Asp Tyr Ile Ser Ile Leu  
 130 135 140  
 Ser Pro Lys Glu Val Ser Leu Asp Ser Arg Val Arg Glu Val Ile Asn  
 145 150 155 160  
 Arg Asn Leu Leu Asp Pro Asn Pro His Met Tyr Glu Asp Ala Gln Leu  
 165 170 175  
 Gln Ile Tyr Thr Leu Met His Arg Asp Ser Phe Pro Arg Phe Leu Asn  
 180 185 190  
 Ser Gln Ile Tyr Lys Ser Phe Val Glu Ser Thr Ala Gly Ser Ser Ser  
 195 200 205  
 Glu Ser  
 210

&lt;210&gt; 3499

&lt;211&gt; 732

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3499

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 120  
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 180  
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 240  
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 300  
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 600  
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<210> 3500

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3500

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			20					25					30		
Ala	Ser	Thr	Gly	Lys	Gln	Gly	Ala	Pro	Gly	Pro	Asp	Trp	Ala	Cys	Ile
		35					40					45			
Phe	His	Val	Val	Leu	Gln	Pro	Ser	Arg	His	Gly	Pro	Glu	Ala	Thr	Ala
	50					55				60					
Ala	Pro	Gln	Ser	Pro	Pro	Thr	Pro	Ala	Val	Pro	Pro	Gly	His	Gly	Ala
65					70				75					80	
His	Asp	Ser	Gly	Pro	Gly	Gln	Arg	Gln	Arg	Gln	Gly	Ala	Gly	Ser	Thr
			85					90						95	
Pro	Ala	Arg	Val	Pro	Val	His	Gly	Ser	Pro	Ser	Ser	Cys	Arg	Ala	Leu
			100					105					110		
Arg	Pro	Ala	Gly	Arg	Ser	Ser	Arg	Ala	Ala	Pro	Arg	Ala	Ser	Pro	Ala
		115					120					125			
Gly	Gln	Ala	Ser	Ser	Arg	Pro	Xaa	Ser	Gly	Ala	Met	His	Arg	Leu	Gly
		130				135					140				
Glu	Gly	Asn	Arg	Ala	Gly	Glu	Lys	Val	Phe	Arg	Arg	Thr	Ala	Val	Gln
145					150					155					160
Lys	Arg	Arg	Val	Gly	Gly	Gly	Thr								
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<210> 3501

<211> 691

<212> DNA

<213> Homo sapiens

<400> 3501

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 180  
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 240  
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 300

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 360  
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 480  
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 540  
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<210> 3502  
 <211> 196  
 <212> PRT  
 <213> Homo sapiens

<400> 3502  
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 20 25 30  
 Glu Ile Lys Leu Tyr Ala Gln Ile Pro Pro Ile Glu Lys Met Asp Ala  
 35 40 45  
 Ser Leu Ser Met Leu Ala Asn Cys Glu Lys Leu Ser Leu Ser Thr Asn  
 50 55 60  
 Cys Ile Glu Lys Ile Ala Asn Leu Asn Gly Leu Lys Asn Leu Arg Ile  
 65 70 75 80  
 Leu Ser Leu Gly Arg Asn Asn Ile Lys Asn Leu Asn Gly Leu Glu Ala  
 85 90 95  
 Val Gly Asp Thr Leu Glu Glu Leu Trp Ile Ser Tyr Asn Phe Ile Glu  
 100 105 110  
 Lys Leu Lys Gly Ile His Ile Met Lys Lys Leu Lys Ile Leu Tyr Met  
 115 120 125  
 Ser Asn Asn Leu Val Lys Asp Trp Ala Glu Phe Val Lys Leu Ala Glu  
 130 135 140  
 Leu Pro Cys Leu Glu Asp Leu Val Phe Val Gly Asn Pro Leu Glu Glu  
 145 150 155 160  
 Lys His Ser Ala Glu Asn Asn Trp Ile Glu Glu Ala Thr Lys Arg Val  
 165 170 175  
 Pro Lys Leu Lys Lys Leu Asp Gly Thr Pro Val Ile Lys Gly Asp Glu  
 180 185 190  
 Glu Glu Asp Asn  
 195

<210> 3503  
 <211> 857  
 <212> DNA  
 <213> Homo sapiens

<400> 3503

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 aatgcccaga gattagcgga gaagctccga gccagaaac gggaacaaga cacaagaag  
 180  
 gagccggtgt ccacaaacgc tgttcagcgg agagtgaag aaatagtgcg gttcacacgg  
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 420  
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&lt;210&gt; 3504

&lt;211&gt; 285

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3504

Ala	Ala	Pro	Arg	Trp	Ser	Ala	Ser	Gly	Pro	Trp	Ile	Arg	Gly	Asn	Gly
1				5				10						15	
Gln	Gly	Cys	Gly	Ser	Leu	Phe	Thr	Leu	Val	Ser	Lys	Pro	Phe	Cys	Ala
			20					25					30		
Ala	Ala	Ala	Ala	Ser	Thr	Ala	Ile	Asn	Ala	Gln	Arg	Leu	Ala	Glu	Lys
			35				40					45			
Leu	Arg	Ala	Gln	Lys	Arg	Glu	Gln	Asp	Thr	Lys	Lys	Glu	Pro	Val	Ser
			50			55					60				
Thr	Asn	Ala	Val	Gln	Arg	Arg	Val	Gln	Glu	Ile	Val	Arg	Phe	Thr	Arg
65					70				75					80	
Gln	Leu	Gln	Arg	Val	His	Pro	Asn	Val	Leu	Ala	Lys	Ala	Leu	Thr	Arg
			85					90					95		
Gly	Ile	Leu	His	Gln	Asp	Lys	Asn	Leu	Val	Val	Ile	Asn	Lys	Pro	Tyr
			100					105					110		
Gly	Leu	Pro	Val	His	Gly	Gly	Pro	Gly	Val	Gln	Leu	Cys	Ile	Thr	Asp
			115				120					125			
Val	Leu	Pro	Ile	Leu	Ala	Lys	Met	Leu	His	Gly	His	Lys	Ala	Glu	Pro

130	135	140
Leu His Leu Cys His Arg Leu Asp Lys Glu Thr Thr Gly Val Met Val		
145	150	155
Leu Ala Trp Asp Lys Asp Met Ala His Gln Val Gln Glu Leu Phe Arg		160
	165	170
Thr Arg Gln Val Val Lys Lys Tyr Trp Ala Ile Thr Val His Val Pro		175
	180	185
Met Pro Ser Ala Gly Val Val Asp Ile Pro Ile Val Glu Lys Glu Gly		190
	195	200
Gln Gly Gln Gln Gln His Pro Arg Met Thr Leu Ser Pro Ser Ser Arg		205
	210	215
Met Asp Asp Gly Lys Met Val Lys Val Arg Arg Ser Arg Asn Ala Gln		220
225	230	235
Val Ala Val Thr Gln Tyr Gln Val Leu Ser Ser Thr Leu Ser Ser Ala		240
	245	250
Leu Val Glu Leu Gln Pro Ile Thr Gly Ile Lys His Gln Leu Arg Val		255
	260	265
His Leu Ser Phe Gly Leu Asp Cys Pro Ile Leu Gly Asp		270
	275	280
		285

&lt;210&gt; 3505

&lt;211&gt; 1612

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3505

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120

cttgctcgcac ccctgggctc tgcggagaag gaacccgagc agcccccggc cctgtggagg  
180

aagggttggtg acttcctgct gaaggccatc atgcgcacca tgtgggttcgc cggcggcttc  
240

caccgggttg ccgtgaaggg gcggcaggcg ctgcccaccg aggcggccat cctcacgctc  
300

gcgcctcact cgtcctactt cgacgccatc cctgtgacca tgacgatgtc ctccatcgtg  
360

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420

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480

cgggcgcagt ccaacggaaa gtggccacag ataatgattt ttccagaagg aacttgtaca  
540

aacaggacct gcctaattac cttcaaacct ggtgcattca tccctggagc gcccgccac  
600

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660

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720

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780

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840



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<210> 3506

<211> 502

<212> PRT

<213> Homo sapiens

<400> 3506

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		20						25					30		
Met	Leu	Leu	Ala	Trp	Pro	Leu	Ala	Leu	Val	Ala	Ser	Leu	Gly	Ser	Ala
		35					40					45			
Glu	Lys	Glu	Pro	Glu	Gln	Pro	Pro	Ala	Leu	Trp	Arg	Lys	Val	Val	Asp
		50				55					60				
Phe	Leu	Leu	Lys	Ala	Ile	Met	Arg	Thr	Met	Trp	Phe	Ala	Gly	Gly	Phe
65					70					75				80	
His	Arg	Val	Ala	Val	Lys	Gly	Arg	Gln	Ala	Leu	Pro	Thr	Glu	Ala	Ala
			85					90					95		
Ile	Leu	Thr	Leu	Ala	Pro	His	Ser	Ser	Tyr	Phe	Asp	Ala	Ile	Pro	Val
		100						105					110		
Thr	Met	Thr	Met	Ser	Ser	Ile	Val	Met	Lys	Thr	Glu	Ser	Arg	Asp	Ile
		115				120						125			
Pro	Ile	Trp	Gly	Thr	Leu	Ile	Gln	Tyr	Ile	Arg	Pro	Val	Phe	Val	Ser
		130				135					140				
Arg	Ser	Asp	Gln	Asp	Ser	Arg	Arg	Lys	Thr	Val	Glu	Glu	Ile	Lys	Arg
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120
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 240  
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 480  
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 720  
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 885

&lt;210&gt; 3508

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3508

Leu	Arg	Thr	Leu	Leu	Asn	Leu	Leu	Phe	Leu	Pro	Asp	Gly	Leu	Cys	Gln
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Arg	Arg	Leu	Leu	Cys	Glu	Val	Ala	Ile	Ala	Val	Tyr	Thr	Phe	Gly	Thr
		20					25						30		
Cys	Ile	Ala	Phe	Leu	Ile	Ile	Ile	Gly	Asp	Gln	Gln	Asp	Lys	Ile	Ile
		35					40					45			
Ala	Val	Met	Ala	Lys	Glu	Pro	Glu	Gly	Ala	Ser	Gly	Pro	Trp	Tyr	Thr
		50				55					60				
Asp	Arg	Lys	Phe	Thr	Ile	Ser	Leu	Thr	Ala	Phe	Leu	Phe	Ile	Leu	Pro
65					70				75					80	
Leu	Ser	Ile	Pro	Arg	Glu	Ile	Gly	Phe	Gln	Lys	Tyr	Ala	Ser	Phe	Leu
			85						90					95	
Ser	Val	Val	Gly	Thr	Trp	Tyr	Val	Thr	Ala	Ile	Val	Ile	Ile	Lys	Tyr
			100					105					110		
Ile	Trp	Pro	Asp	Lys	Glu	Met	Thr	Pro	Gly	Asn	Ile	Leu	Thr	Arg	Pro
		115					120					125			
Ala	Ser	Trp	Met	Ala	Val	Phe	Asn	Ala	Met	Pro	Thr	Ile	Cys	Phe	Gly
		130				135					140				
Phe	Gln	Cys	His	Val	Ser	Ser	Val	Pro	Val	Phe	Asn	Ser	Met	Gln	Gln
145					150					155				160	
Pro	Glu	Val	Lys	Thr	Trp	Gly	Gly	Val	Val	Thr	Ala	Ala	Met	Val	Ile

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Gly Ala Ala Val Asp Pro Asp  
195

<210> 3509  
<211> 331  
<212> DNA  
<213> Homo sapiens

<400> 3509  
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120  
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<211> 547

<212> PRT

<213> Homo sapiens

<400> 3516

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 Ser Glu Thr Leu Glu Ser Arg His His Lys Ile Lys Thr Gly Ser Pro  
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&lt;210&gt; 3517

&lt;211&gt; 342

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3517

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&lt;210&gt; 3520

&lt;211&gt; 303

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3520

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Pro Thr Thr Val Pro Ser Pro Ala Ser Gly Lys Pro Ser Ser Glu Pro
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Pro Pro Ala Pro Glu Ser Ala Ala Asp Ser Gly Val Glu Glu Ala Asp
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&lt;210&gt; 3521

&lt;211&gt; 638

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3521

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&lt;210&gt; 3522

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3522

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Ser	Pro	Ala	Ser	Ser												
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&lt;210&gt; 3523

&lt;211&gt; 2614

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3523

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&lt;210&gt; 3524

&lt;211&gt; 444

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3524

Met	Ala	Pro	Asp	Pro	Leu	Ala	Ala	Glu	Thr	Ala	Ala	Gln	Gly	Leu	Thr
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Pro	Arg	Tyr	Phe	Thr	Trp	Asp	Glu	Val	Ala	Gln	Arg	Ser	Gly	Cys	Glu
			20				25						30		
Glu	Arg	Trp	Leu	Val	Ile	Asp	Arg	Lys	Val	Tyr	Asn	Ile	Ser	Asp	Phe
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Ser	Arg	Arg	His	Pro	Gly	Gly	Ser	Arg	Val	Ile	Ser	His	Tyr	Ala	Gly
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Gln	Asp	Ala	Thr	Asp	Pro	Phe	Val	Ala	Phe	His	Ile	Asn	Lys	Gly	Leu
65				70				75						80	
Val	Lys	Lys	Tyr	Met	Asn	Ser	Leu	Leu	Ile	Gly	Glu	Leu	Ser	Pro	Glu
			85				90						95		
Gln	Pro	Ser	Phe	Glu	Pro	Thr	Lys	Asn	Lys	Glu	Leu	Thr	Asp	Glu	Phe
		100					105					110			
Arg	Glu	Leu	Arg	Ala	Thr	Val	Glu	Arg	Met	Gly	Leu	Met	Lys	Ala	Asn

115	120	125
His Val Phe Phe Leu Leu Tyr	Leu Leu His Ile Leu Leu Leu Asp Gly	
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Ala Ala Trp Leu Thr Leu Trp Val Phe Gly Thr Ser Phe Leu Pro Phe		
145	150	155
Leu Leu Cys Ala Val Leu Leu Ser Ala Val Gln Ala Gln Ala Gly Trp		
165	170	175
Leu Gln His Asp Phe Gly His Leu Ser Val Phe Ser Thr Ser Lys Trp		
180	185	190
Asn His Leu Leu His His Phe Val Ile Gly His Leu Lys Gly Ala Pro		
195	200	205
Ala Ser Trp Trp Asn His Met His Phe Gln His His Ala Lys Pro Asn		
210	215	220
Cys Phe Arg Lys Asp Pro Asp Ile Asn Met His Pro Phe Phe Phe Ala		
225	230	235
Leu Gly Lys Ile Leu Ser Val Glu Leu Gly Lys Gln Lys Lys Lys Tyr		
245	250	255
Met Pro Tyr Asn His Gln His Lys Tyr Phe Phe Leu Ile Gly Pro Pro		
260	265	270
Ala Leu Leu Pro Leu Tyr Phe Gln Trp Tyr Ile Phe Tyr Phe Val Ile		
275	280	285
Gln Arg Lys Lys Trp Val Asp Leu Val Trp Met Ile Thr Phe Tyr Val		
290	295	300
Arg Phe Phe Leu Thr Tyr Val Pro Leu Leu Gly Leu Lys Ala Phe Leu		
305	310	315
Gly Leu Phe Phe Ile Val Arg Phe Leu Glu Ser Asn Trp Phe Val Trp		
325	330	335
Val Thr Gln Met Asn His Ile Pro Met His Ile Asp His Asp Arg Asn		
340	345	350
Met Asp Trp Val Ser Thr Gln Leu Gln Ala Thr Cys Asn Val His Lys		
355	360	365
Ser Ala Phe Asn Asp Trp Phe Ser Gly His Leu Asn Phe Gln Ile Glu		
370	375	380
His His Leu Phe Pro Thr Met Pro Arg His Asn Tyr His Lys Val Ala		
385	390	395
Pro Leu Val Gln Ser Leu Cys Ala Lys His Gly Ile Glu Tyr Gln Ser		
405	410	415
Lys Pro Leu Leu Ser Ala Phe Ala Asp Ile Ile His Ser Leu Lys Glu		
420	425	430
Ser Gly Gln Leu Trp Leu Asp Ala Tyr Leu His Gln		
435	440	

&lt;210&gt; 3525

&lt;211&gt; 1116

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3525

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&lt;210&gt; 3526

&lt;211&gt; 304

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3526

Ile	Thr	Asp	Glu	Lys	Arg	Ile	Phe	Phe	Tyr	Ile	Val	Ala	Val	Ala	Asp
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Ala	Lys	Lys	Ser	Arg	Glu	Phe	Asn	Pro	Asn	Asn	Ser	Thr	Ala	Val	Leu
			20					25					30		
Arg	Lys	Gly	Ile	Cys	Glu	Tyr	His	Leu	Lys	Asn	Tyr	Ala	Ala	Ala	Leu
		35					40					45			
Glu	Thr	Phe	Ile	Gly	Gly	Gln	Lys	Leu	Xaa	Ala	Asp	Ala	Asn	Phe	Ser
	50					55					60				
Asp	Trp	Ile	Lys	Arg	Cys	Gln	Glu	Ala	Gln	Asn	Gly	Ser	Glu	Ser	Glu
65				70						75				80	
Val	Val	Met	Glu	Pro	Ala	Leu	Glu	Gly	Thr	Gly	Lys	Glu	Gly	Lys	Lys
				85				90						95	
Ala	Ser	Ser	Arg	Lys	Arg	Thr	Leu	Ala	Glu	Pro	Pro	Ala	Lys	Gly	Leu
			100					105					110		
Leu	Gln	Pro	Val	Lys	Leu	Ser	Arg	Ala	Glu	Leu	Tyr	Lys	Glu	Pro	Thr

115	120	125
Asn Glu Glu Leu Asn Arg Leu Arg Glu Thr Glu Ile Leu Phe His Ser		
130	135	140
Ser Leu Leu Arg Leu Gln Val Glu Glu Leu Leu Lys Glu Val Arg Leu		
145	150	155
Ser Glu Lys Lys Lys Asp Arg Ile Asp Ala Phe Leu Arg Glu Val Asn		
165	170	175
Gln Arg Val Val Arg Val Pro Ser Val Pro Glu Thr Glu Leu Thr Asp		
180	185	190
Gln Ala Trp Leu Pro Ala Gly Val Arg Val Pro Leu His Gln Val Pro		
195	200	205
Tyr Ala Val Lys Gly Cys Phe Arg Phe Leu Pro Pro Ala Gln Val Thr		
210	215	220
Val Val Gly Ser Tyr Leu Leu Gly Thr Cys Ile Arg Pro Asp Ile Asn		
225	230	235
Val Asp Val Ala Leu Thr Met Pro Arg Glu Ile Leu Gln Asp Lys Asp		
245	250	255
Gly Leu Asn Gln Arg Tyr Phe Arg Lys Arg Ala Leu Tyr Leu Ala His		
260	265	270
Leu Ala His His Leu Ala Gln Asp Pro Leu Phe Gly Ser Val Cys Phe		
275	280	285
Ser Tyr Thr Asn Gly Cys His Leu Lys Pro Ser Leu Leu Leu Arg Pro		
290	295	300

&lt;210&gt; 3527

&lt;211&gt; 2838

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3527

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360

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420

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480

gagaacccc cccgggtctg cagggaacctc atggactgtg agcagaagat ggtggatggt  
540

acctactggg tggatccaaa ccttggtgctc tcctctgaca ccatcgaggt ctcttgcaac  
600

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660

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720



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<210> 3528

<211> 281

<212> PRT

<213> Homo sapiens

<400> 3528

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Leu	Phe	Phe	Ser	Cys	Ser	Pro	Arg	Gly	Pro	Pro	Gly	Pro	Arg	Gly	Arg
			20					25					30		
Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Gly	Pro	Ile	Gln	Leu	Gln	Gln	Asp
			35				40					45			
Asp	Leu	Gly	Ala	Ala	Phe	Gln	Thr	Trp	Met	Asp	Thr	Ser	Gly	Ala	Leu
	50					55				60					
Arg	Pro	Glu	Ser	Tyr	Ser	Tyr	Pro	Asp	Arg	Leu	Val	Leu	Asp	Gln	Gly
65				70				75						80	
Gly	Glu	Ile	Phe	Lys	Thr	Leu	His	Tyr	Leu	Ser	Asn	Leu	Ile	Gln	Ser
				85				90						95	
Ile	Lys	Thr	Pro	Leu	Gly	Thr	Lys	Glu	Asn	Pro	Ala	Arg	Val	Cys	Arg
			100					105					110		
Asp	Leu	Met	Asp	Cys	Glu	Gln	Lys	Met	Val	Asp	Gly	Thr	Tyr	Trp	Val
		115					120					125			
Asp	Pro	Asn	Leu	Gly	Cys	Ser	Ser	Asp	Thr	Ile	Glu	Val	Ser	Cys	Asn
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Phe	Thr	His	Gly	Gly	Gln	Thr	Cys	Leu	Lys	Pro	Ile	Thr	Ala	Ser	Lys
145				150						155					160
Val	Glu	Phe	Ala	Ile	Ser	Arg	Val	Gln	Met	Asn	Phe	Leu	His	Leu	Leu
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Phe	Arg	Ala	Trp	Asn	Gly	Gln	Ile	Phe	Glu	Ala	Gly	Gly	Gln	Phe	Arg
	210				215						220				
Pro	Glu	Val	Ser	Met	Asp	Gly	Cys	Lys	Val	Gln	Asp	Gly	Arg	Trp	His

225					230					235				240
Gln	Thr	Leu	Phe	Thr	Phe	Arg	Thr	Gln	Asp	Pro	Gln	Gln	Leu	Pro Ile
				245					250					255
Ile	Ser	Val	Asp	Asn	Leu	Pro	Pro	Ala	Ser	Ser	Gly	Lys	Gln	Tyr Arg
			260					265					270	
Leu	Glu	Val	Gly	Pro	Ala	Cys	Phe	Leu						
		275					280							

&lt;210&gt; 3529

&lt;211&gt; 3026

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3529

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 Thr Thr Ala Trp Arg Pro Ala Thr Leu Pro Pro Arg Ser Pro Ser His  
 20 25 30  
 Cys Xaa Ser Pro Val Ala Gly Val Ala His Arg Phe His Ser Thr Cys  
 35 40 45  
 Gly Lys Asn Val Thr Leu Glu Glu Asp Gly Thr Arg Ala Val Arg Ala  
 50 55 60  
 Ala Gly Tyr Ala His Gly Leu Val Phe Ser Thr Lys Glu Leu Arg Ala  
 65 70 75 80  
 Glu Glu Val Phe Glu Val Lys Val Glu Glu Leu Asp Glu Lys Trp Ala  
 85 90 95  
 Gly Ser Leu Arg Leu Gly Leu Thr Thr Leu Ala Pro Gly Glu Met Gly  
 100 105 110  
 Pro Gly Ala Gly Gly Gly Gly Pro Gly Leu Pro Pro Ser Leu Pro Glu  
 115 120 125  
 Leu Arg Thr Lys Thr Thr Trp Met Val Ser Ser Cys Glu Val Arg Arg  
 130 135 140  
 Asp Gly Gln Leu Gln Arg Met Asn Tyr Gly Arg Asn Leu Glu Arg Leu  
 145 150 155 160  
 Gly Val Lys Trp Leu Ala Pro Gly Thr Gly Glu Gly Leu Gly Val Glu  
 165 170 175  
 Val Ala Gly Arg Gly Gly Leu Asn Ile Val Arg Pro Cys Pro Thr Ser  
 180 185 190  
 Val Leu Gly Gly Glu Pro Cys Gly Cys Ser Ser Gly Gly Arg  
 195 200 205

<210> 3531  
 <211> 879  
 <212> DNA  
 <213> Homo sapiens

<400> 3531  
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 aaaattatta aagtgaaggt tcagaagaag gcagatatgg tgaacgaaga cttgctgagt  
 180

gatggaacga gtgagaatga atctggattt tgggattcct tcaaattggg ctttacagga  
 240  
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 420  
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 480  
 cggtggcttc atcaacaaac tgaaaaacag cgtatcatct ggggttacia gatcctcttc  
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 ctggatgtac ttttcccact agttgttgac aagttcctgt ttgtggatgc tgatcagatt  
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 660  
 actcctttct gtgacagccg aagagaaatg gacggctaca gggtctggaa gtcagggtac  
 720  
 tgggccagtc atttagccgg gcgaaagtat catatcaggt actgaaaaga agcactccta  
 780  
 acactgttac ggggttttcc ttaaaattga tttgtgtgg ttaaaattgt gaataggtaa  
 840  
 tacattggta tggttgaaaa ataaaaatga taaaaaata  
 879

&lt;210&gt; 3532

&lt;211&gt; 254

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3532

Xaa	Ile	Leu	Arg	Leu	Arg	Lys	Gly	Arg	Ser	Glu	Asp	Ile	Tyr	Arg	Ile
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Tyr	Ser	His	Asp	Gly	Thr	Asp	Ser	Pro	Pro	Asp	Ala	Asp	Glu	Val	Val
			20					25					30		
Ile	Val	Leu	Asn	Asn	Phe	Lys	Ser	Lys	Ile	Ile	Lys	Val	Lys	Val	Gln
		35					40					45			
Lys	Lys	Ala	Asp	Met	Val	Asn	Glu	Asp	Leu	Leu	Ser	Asp	Gly	Thr	Ser
	50					55					60				
Glu	Asn	Glu	Ser	Gly	Phe	Trp	Asp	Ser	Phe	Lys	Trp	Gly	Phe	Thr	Gly
65				70					75					80	
Gln	Lys	Thr	Glu	Glu	Val	Lys	Gln	Asp	Lys	Asp	Asp	Ile	Ile	Asn	Ile
			85					90					95		
Phe	Ser	Val	Ala	Ser	Gly	His	Leu	Tyr	Glu	Arg	Phe	Leu	Arg	Ile	Met
		100					105					110			
Met	Leu	Ser	Val	Leu	Lys	Asn	Thr	Lys	Thr	Pro	Val	Lys	Phe	Trp	Phe
	115					120					125				
Leu	Lys	Asn	Tyr	Leu	Ser	Pro	Thr	Phe	Lys	Glu	Phe	Ile	Pro	Tyr	Met
	130				135					140					
Ala	Asn	Glu	Tyr	Asn	Phe	Gln	Tyr	Glu	Leu	Val	Gln	Tyr	Lys	Trp	Pro
145				150				155						160	
Arg	Trp	Leu	His	Gln	Gln	Thr	Glu	Lys	Gln	Arg	Ile	Ile	Trp	Gly	Tyr
		165				170					175				
Lys	Ile	Leu	Phe	Leu	Asp	Val	Leu	Phe	Pro	Leu	Val	Val	Asp	Lys	Phe

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<210> 3533
<211> 1151
<212> DNA
<213> Homo sapiens
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2697

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1151

<210> 3534  
<211> 313  
<212> PRT  
<213> Homo sapiens

<400> 3534  
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Pro Ser Gln Ser Gln Ser Arg Leu Pro Gln Trp Thr His Pro Asn Ser  
20 25 30  
Met Asp Asn Leu Pro Ser Ala Ala Ser Pro Leu Glu Gln Asn Pro Ser  
35 40 45  
Lys His Gly Ala Ile Pro Gly Gly Leu Ser Ile Gly Pro Pro Gly Lys  
50 55 60  
Ser Ser Ile Asp Asp Ser Tyr Gly Arg Tyr Asp Leu Ile Gln Asn Ser  
65 70 75 80  
Glu Ser Pro Ala Ser Pro Pro Val Ala Val Pro His Ser Trp Ser Arg  
85 90 95  
Ala Lys Ser Asp Ser Asp Lys Ile Ser Asn Gly Ser Ser Ile Asn Trp  
100 105 110  
Pro Pro Glu Phe His Pro Gly Val Pro Trp Lys Gly Leu Gln Asn Ile  
115 120 125  
Asp Pro Glu Asn Asp Pro Asp Val Thr Pro Gly Ser Val Pro Thr Gly  
130 135 140  
Pro Thr Ile Asn Thr Thr Ile Gln Asp Val Asn Arg Tyr Leu Leu Lys  
145 150 155 160  
Ser Gly Gly Ser Ser Pro Pro Ser Ser Gln Asn Ala Thr Leu Pro Ser  
165 170 175  
Ser Ser Ala Trp Pro Leu Ser Ala Ser Gly Tyr Ser Ser Ser Phe Ser  
180 185 190  
Ser Ile Ala Ser Ala Pro Ser Val Ala Gly Lys Leu Ser Asp Ile Lys  
195 200 205  
Ser Thr Trp Ser Ser Gly Pro Thr Ser His Thr Gln Ala Ser Leu Ser  
210 215 220  
His Glu Leu Trp Lys Val Pro Arg Asn Ser Thr Ala Pro Thr Arg Pro  
225 230 235 240  
Pro Pro Gly Leu Thr Asn Pro Lys Pro Ser Ser Thr Trp Gly Ala Ser  
245 250 255  
Pro Leu Gly Trp Thr Ser Ser Tyr Ser Ser Gly Ser Ala Trp Ser Thr  
260 265 270  
Asp Thr Ser Gly Arg Thr Ser Ser Trp Leu Val Leu Arg Asn Leu Thr  
275 280 285  
Pro Gln Val Gln Tyr Gly Ala Pro Ala Ser Leu Ser Met Ile Gln Gly  
290 295 300  
Gly Phe Pro Leu Gly Pro Gln Cys Arg  
305 310

<210> 3535  
<211> 723  
<212> DNA  
<213> Homo sapiens



10/043, 649  
B2

<400> 3535  
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 120  
 cggcagacct gctacagggt ctctctgctg gtgaccaccc accccacaac cactcaagaa  
 180  
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 240  
 gagattgcaa tctgtgcttt gaaccagatg cactattact aatagctgga ggaaattttg  
 300  
 aagatcagct tagagaagaa gtggtccaga gagtttctct tctccttctc tattacatta  
 360  
 ttcatcagga agagatctgt tcttcaaagc tcaacatgag taataaagag tataaatttt  
 420  
 acctacacag cctactgagc ctcaggcagg atgaagattc ctctttcctt tcacagaatg  
 480  
 agacagaaga tatcttggct ttcaccaggc agtactttga cacttctcaa agccagtgtg  
 540  
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 600  
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 720  
 gta  
 723

<210> 3536  
 <211> 163  
 <212> PRT  
 <213> Homo sapiens

<400> 3536  
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 20 25 30  
 Arg Val Ser Leu Leu Leu Leu Tyr Tyr Ile Ile His Gln Glu Glu Ile  
 35 40 45  
 Cys Ser Ser Lys Leu Asn Met Ser Asn Lys Glu Tyr Lys Phe Tyr Leu  
 50 55 60  
 His Ser Leu Leu Ser Leu Arg Gln Asp Glu Asp Ser Ser Phe Leu Ser  
 65 70 75 80  
 Gln Asn Glu Thr Glu Asp Ile Leu Ala Phe Thr Arg Gln Tyr Phe Asp  
 85 90 95  
 Thr Ser Gln Ser Gln Cys Met Glu Thr Lys Thr Leu Gln Lys Lys Ser  
 100 105 110  
 Gly Ile Val Ser Ser Glu Gly Ala Asn Glu Ser Thr Leu Pro Gln Leu  
 115 120 125  
 Ala Ala Met Ile Ile Thr Leu Ser Leu Gln Gly Val Cys Leu Gly Gln  
 130 135 140  
 Gly Asn Leu Pro Ser Pro Asp Tyr Phe Thr Glu Tyr Ile Phe Ser Ser

145  
Leu Asn Arg

150

155

160

<210> 3537  
<211> 714  
<212> DNA  
<213> Homo sapiens

<400> 3537  
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120  
cataaggcca agagtaagtg cgtgaatgca ctttaagaaa agtcaggaca cgagcttcac  
180  
atgacaggcc ccgcgtgggc gaccagccag ccctggggac gggcacgcca cgccacacac  
240  
acactcacca ctgtacagcc tgggactccc attgcatatt cacaggcccc gccgggcagg  
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gcacctcaag gctgggggag gggcaggggc agggaggagc cgtgggggtgt ccctgggtgg  
360  
gtggagaggg cagcatgtga gaggcaaagc tgcaccaaca ctgggcgtga gacgtgagca  
420  
gcctcaggtg tacggcatga gatgtgtgtg gttggggggg gtctcgtga cccgggaggg  
480  
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540  
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660  
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714

<210> 3538  
<211> 154  
<212> PRT  
<213> Homo sapiens

<400> 3538  
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1 5 10 15  
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20 25 30  
Leu Lys Asp Pro Ser Ser Asn Pro Ala Gly Pro Arg Ala Thr Ala Gly  
35 40 45  
Gln Gly Val Ala Pro Gly Phe Arg His Ala Thr Thr Thr Arg Ala Arg  
50 55 60  
Ala Thr His Ala Ser Cys Ala His Leu Thr His Thr Pro Leu Pro Gly  
65 70 75 80  
His Ala Asp Thr Pro Gln Pro His Thr Ser His Ala Val His Leu Arg  
85 90 95  
Leu Leu Thr Ser His Ala Gln Cys Trp Cys Thr Phe Ala Ser His Met

	100		105		110										
Leu	Pro	Ser	Pro	Pro	Thr	Gln	Gly	His	Pro	Thr	Ala	Pro	Pro	Cys	Pro
	115						120					125			
Cys	Pro	Ser	Pro	Ser	Leu	Glu	Val	Pro	Cys	Pro	Ala	Gly	Pro	Val	Asn
	130					135					140				
Met	Gln	Trp	Glu	Ser	Gln	Ala	Val	Gln	Trp						
145					150										

<210> 3539  
 <211> 818  
 <212> DNA  
 <213> Homo sapiens

<400> 3539  
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 120  
 cggggggcgg aggttgcagt gagccgagat cgcgcaggta cgctccagtc tgggcgacaa  
 180  
 gagcgaaact cgatatcaaa aaaaaaaaaa acgtcctgat cccagagcct cttcacgcgt  
 240  
 cccctaccac agcacttcag agaagcaggc ctttaatacag tgtgtctaga tgcagctgct  
 300  
 gactgtcacc cctaccccg cttctctcca gtctgcggac ggccagtcac cccattgcc  
 360  
 cagaatcaga cgaccctcgg ttcttccaga gccaaagctgg gcaacttccc ctggcaagcc  
 420  
 ttcaccagta tccacggccg tgggggcggg gccctgctgg gggacagatg gacccctact  
 480  
 gctgcccaca ccgtctaccc caaggacagt gtttctctca ggaagaacca gactgtgaat  
 540  
 gtgttcttgg gccacacagc catagatgag atgctgaaac tggggaacca ccctgtccac  
 600  
 cgtgtcgttg tgcaccccg ctaaccgtcag aatgagtcac ataactttag cggggacatc  
 660  
 gccctcctgg agctgcagca cagcatcccc ctgggcccc aacgtcctccc ggtctgtctg  
 720  
 cccgataatg agaccctcta ccgcagcggc ttgttgggct acgtcagtgg gtttggcatg  
 780  
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 818

<210> 3540  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 3540  
 Ser Val Cys Leu Asp Ala Ala Ala Asp Cys His Pro Tyr Pro Ala Ser  
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 Leu Pro Val Cys Gly Arg Pro Val Thr Pro Ile Ala Gln Asn Gln Thr  
 20 25 30  
 Thr Leu Gly Ser Ser Arg Ala Lys Leu Gly Asn Phe Pro Trp Gln Ala

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          35          40          45
Phe Thr Ser Ile His Gly Arg Gly Gly Gly Ala Leu Leu Gly Asp Arg
   50          55          60
Trp Ile Leu Thr Ala Ala His Thr Val Tyr Pro Lys Asp Ser Val Ser
65          70          75          80
Leu Arg Lys Asn Gln Ser Val Asn Val Phe Leu Gly His Thr Ala Ile
          85          90          95
Asp Glu Met Leu Lys Leu Gly Asn His Pro Val His Arg Val Val Val
          100          105          110
His Pro Asp Tyr Arg Gln Asn Glu Ser His Asn Phe Ser Gly Asp Ile
          115          120          125
Ala Leu Leu Glu Leu Gln His Ser Ile Pro Leu Gly Pro Asn Val Leu
          130          135          140
Pro Val Cys Leu Pro Asp Asn Glu Thr Leu Tyr Arg Ser Gly Leu Leu
145          150          155          160
Gly Tyr Val Ser Gly Phe Gly Met Glu Met Gly Trp Leu Thr Thr Glu
          165          170          175
Leu Lys Tyr Ser
          180

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<210> 3541  
 <211> 722  
 <212> DNA  
 <213> Homo sapiens

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<400> 3541
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180
ggaccaatta cctctttttt gctctccctc gagaagctcc agatggcgctc ttccgtgggc
240
aacgtggccg acagcacaga accaacgaaa cgtatgcttt ccttccaagg gttagctgag
300
ttggcacatc gagaatatca ggcaggagat tttgaggcag ctgagagaca ctgcatgcag
360
ctctggagac aagagccaga caatactggt gtgcttttat tactttcatc tatacacttc
420
cagtgtcgaa ggctggacag atctgctcac tttagcactc tggcaattaa acagaacccc
480
cttctggcag aagcttattc gaatttgggg aatgtgtaca aggaaagagg gcagttgcag
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gaggcaattg agcattatcg acatgcattg cgtctcaaac ctgatttcat cgatgggttat
600
attaacgctg cagccgcctt ggtagcagcg ggtgacatgg aaggggcagt acaagcttac
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720
aa
722

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<210> 3542

<211> 153  
 <212> PRT  
 <213> Homo sapiens

<400> 3542  
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 Arg Met Leu Ser Phe Gln Gly Leu Ala Glu Leu Ala His Arg Glu Tyr  
 20 25 30  
 Gln Ala Gly Asp Phe Glu Ala Ala Glu Arg His Cys Met Gln Leu Trp  
 35 40 45  
 Arg Gln Glu Pro Asp Asn Thr Gly Val Leu Leu Leu Leu Ser Ser Ile  
 50 55 60  
 His Phe Gln Cys Arg Arg Leu Asp Arg Ser Ala His Phe Ser Thr Leu  
 65 70 75 80  
 Ala Ile Lys Gln Asn Pro Leu Leu Ala Glu Ala Tyr Ser Asn Leu Gly  
 85 90 95  
 Asn Val Tyr Lys Glu Arg Gly Gln Leu Gln Glu Ala Ile Glu His Tyr  
 100 105 110  
 Arg His Ala Leu Arg Leu Lys Pro Asp Phe Ile Asp Gly Tyr Ile Asn  
 115 120 125  
 Ala Ala Ala Ala Leu Val Ala Ala Gly Asp Met Glu Gly Ala Val Gln  
 130 135 140  
 Ala Tyr Val Ser Ala Leu Gln Pro Gly  
 145 150

<210> 3543  
 <211> 1206  
 <212> DNA  
 <213> Homo sapiens

<400> 3543  
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 120  
 gtttggttgt tgctcaggat gtgtaatagt ttctcttcag ccataagcca cgcttggtag  
 180  
 atattaattg agtggagaga tcttgcacct cttccagtta tgcatttggtg gtttgctgctc  
 240  
 tgatttggtg cacttggaag atcactgttt tgtgttctac gacccaattg agaggattat  
 300  
 gtggagctaa gttttaccaa tcaggatcat ccttccttgt gggtagcag gcagttataa  
 360  
 gattgcaaaa tgggtctccg gattcacttt gttgttgacc cacatgggtg gtgctgcatg  
 420  
 ggtttgattg tctttgtttg gttatacaat attgttttaa ttcccaaat tgcctctttt  
 480  
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 540  
 atattctgtc tggttgcctt agtgagggcc tccataactg atccaggaag actccctgag  
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 660

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 720  
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 780  
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 1020  
 tctgtatcca acaacagtct tggagatctc atgaagattt ctgaaacttt tgctctgagg  
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 1206

<210> 3544  
 <211> 273  
 <212> PRT  
 <213> Homo sapiens

<400> 3544  
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 Met Gly Leu Ile Val Phe Val Trp Leu Tyr Asn Ile Val Leu Ile Pro  
 20 25 30  
 Lys Ile Val Leu Phe Pro His Tyr Glu Glu Gly His Ile Pro Gly Ile  
 35 40 45  
 Leu Ile Ile Ile Phe Tyr Gly Ile Ser Ile Phe Cys Leu Val Ala Leu  
 50 55 60  
 Val Arg Ala Ser Ile Thr Asp Pro Gly Arg Leu Pro Glu Asn Pro Lys  
 65 70 75 80  
 Ile Pro His Gly Glu Arg Glu Phe Trp Glu Leu Cys Asn Lys Cys Asn  
 85 90 95  
 Leu Met Arg Pro Lys Arg Ser His His Cys Ser Arg Cys Gly His Cys  
 100 105 110  
 Val Arg Arg Met Asp His His Cys Pro Trp Ile Asn Asn Cys Val Gly  
 115 120 125  
 Glu Asp Asn His Trp Leu Phe Leu Gln Leu Cys Phe Tyr Thr Glu Leu  
 130 135 140  
 Leu Thr Cys Tyr Ala Leu Met Phe Ser Phe Cys His Tyr Tyr Tyr Phe  
 145 150 155 160  
 Leu Pro Leu Lys Lys Arg Asn Leu Asp Leu Phe Val Phe Arg His Glu  
 165 170 175  
 Leu Ala Ile Met Arg Leu Ala Ala Phe Met Gly Ile Thr Met Leu Val  
 180 185 190  
 Gly Ile Thr Gly Leu Phe Tyr Thr Gln Leu Ile Gly Ile Ile Thr Pro  
 195 200 205  
 Cys Ser Leu Ile Leu Leu Lys Cys Gly Ser Val Ser Asn Asn Ser Leu

210		215		220											
Gly	Asp	Leu	Met	Lys	Ile	Ser	Glu	Thr	Phe	Ala	Leu	Arg	Ile	Pro	Ser
225					230					235					240
Phe	Val	Val	Met	Cys	Pro	Glu	Asn	Ser	Ser	Leu	Arg	Val	Phe	Asn	Ser
				245					250					255	
Val	Lys	Leu	Leu	Leu	Cys	Leu	Asp	Ser	Pro	Leu	Ile	Gln	Trp	Ser	Thr
			260					265					270		

Lys

&lt;210&gt; 3545

&lt;211&gt; 3657

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3545

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240  
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360  
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420  
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720  
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780  
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840  
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900  
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960  
gtggatcgaa gagaaaatga tgcagtgtgg ctggctaccc aaaaccacag cactctgggtg  
1020  
acagagcgca gtgctgtgcc ctccctgcct gttaacccgg aatactcagc cacgcggaat  
1080  
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<211> 792

<212> PRT

<213> Homo sapiens

<400> 3546

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Asp	Glu	Cys	Cys	Ser	Val	His	Arg	Ser	Leu	Gly	Arg	His	Ile	Ser	Ile
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Val	His	Thr	Leu	Ala	Ser	Asn	Gly	Ala	Asn	Ser	Ile	Trp	Glu	His	Ser
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Lys Ala Gly Gln Thr	Leu Gln Ala Glu	Leu Leu Val Val Tyr Gly Ala
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Arg Leu Gln Pro Phe	His Ser Thr Glu Leu	Glu Asp Asp Ala Ile Tyr

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&lt;210&gt; 3547

&lt;211&gt; 1039

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3547

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&lt;210&gt; 3548

&lt;211&gt; 346

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3548

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Cys	Leu	Pro	Asp	Ile	Asp	Ser	Glu	Glu	Tyr	Phe	Cys	Val	Lys	Arg	Ile	115	120	125	
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&lt;211&gt; 2542

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3549

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<400> 3550

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Ser	Lys	Glu	Lys	Glu	Arg	Ala	Ser	Leu	Asp	Lys	Lys	Arg	Asp	Lys	Asp
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Tyr	Arg	Arg	Lys	Glu	Ile	Leu	Pro	Phe	Glu	Lys	Met	Lys	Glu	Gln	Arg
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Leu	Arg	Arg	Arg	Arg	Glu	Ile	Ala	Glu	Arg	Glu	Arg	Arg	Glu	Arg	Glu
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Glu	Arg	Glu	Arg	Leu	Glu	Ile	Glu	Arg	Gln	Lys	Leu	Glu	Arg	Glu	Arg
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			260					265					270		
Pro	Thr	Ala	Arg	Arg	Glu	Asp	Pro	Ser	Phe	Glu	Arg	Tyr	Pro	Lys	Asn
	275						280					285			
Phe	Ser	Asp	Ser	Arg	Arg	Asn	Glu	Pro	Pro	Pro	Pro	Arg	Asn	Glu	Leu
	290					295						300			
Arg	Glu	Ser	Asp	Arg	Arg	Glu	Val	Arg	Gly	Glu	Arg	Asp	Glu	Arg	Arg
305					310					315				320	
Thr	Val	Ile	Ile	His	Asp	Arg	Pro	Asp	Ile	Thr	His	Pro	Arg	His	Pro
				325					330					335	
Arg	Glu	Ala	Gly	Pro	Asn	Pro	Ser	Arg	Pro	Thr	Ser	Trp	Lys	Ser	Asp
			340					345					350		
Gly	Ser	Met	Ser	Thr	Asp	Lys	Arg	Glu	Thr	Arg	Val	Glu	Arg	Pro	Glu
	355					360						365			
Arg	Ser	Gly	Arg	Glu	Val	Ser	Gly	His	Ser	Val	Arg	Gly	Ala	Pro	Pro

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      370      375      380
Gly Asn Arg Ser Ser Ala Ser Gly Tyr Gly Ser Arg Glu Gly Asp Arg
385      390      395      400
Gly Val Ile Thr Asp Arg Gly Gly Gly Ser Gln His Tyr Pro Glu Glu
      405      410      415
Arg His Val Val Glu Arg His Gly Arg Asp Thr Ser Gly Pro Arg Lys
      420      425      430
Glu Trp His Gly Pro Pro Ser Gln Gly Pro Ser Tyr His Asp Thr Arg
      435      440      445
Arg Met Gly Asp Gly Arg Ala Gly Ala Gly Met Ile Thr Gln His Ser
      450      455      460
Ser Asn Ala Ser Pro Ile Asn Arg Ile Val Gln Ile Ser Gly Asn Ser
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Met Pro Arg Gly Ser Gly Ser Gly Phe Lys Pro Phe Lys Gly Gly Pro
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Pro Arg Arg Phe
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<210> 3551  
 <211> 545  
 <212> DNA  
 <213> Homo sapiens

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<400> 3551
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120
tttcttgtga ctggctataa attccatgca gtgctggaat gtgcttctca cagtttagagt
180
gctgagcacc tgttttatatt cacactccct tgattcctgg ggtaaateccc atctccgcag
240
catgggctcc agttaaatte attagtgggc cagatgtgtg tcccctgtca gctggccaag
300
taaccccact gtttatcgac aggtttctcag gaatcagata gctcgcagtc ggccaagaag
360
gacatgctgg ctgccttgaa gtccaggcag gaagctctgg aggaaaccct gcgtcagagg
420
ctggaggaac tgaagaagct gtgtctccga gaagctgtaa gcctttccta gctcatcccg
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540
gtcat
545

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<210> 3552  
 <211> 55  
 <212> PRT  
 <213> Homo sapiens

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<400> 3552
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1      5      10      15
Ala Lys Lys Asp Met Leu Ala Ala Leu Lys Ser Arg Gln Glu Ala Leu

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	20		25		30										
Glu	Glu	Thr	Leu	Arg	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Lys	Leu	Cys	Leu
	35		40		45										
Arg	Glu	Ala	Val	Ser	Leu	Ser									
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<210> 3553  
 <211> 1412  
 <212> DNA  
 <213> Homo sapiens

<400> 3553  
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 gatgaccagc tcaacatcct gcccatctcc tcccacgttg ccaccatgga ggccctgcct  
 180  
 cccagactc cggatgagag tcttggtcct tctgatctgg agctgaggga gttgaaggag  
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 480  
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 720  
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 780  
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 840  
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 960  
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 1020  
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 1080  
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 1200  
 cctcctgtgc cccccacca gaatgccctt ccaaaagtgc ttgctgttat ccaggatatg  
 1260

gaacagaggc gtccttgtgg cagtgatttg gggaaccact gaggcacag gaattagtgg  
 1320  
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 1412

<210> 3554

<211> 419

<212> PRT

<213> Homo sapiens

<400> 3554

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Gln	Asp	Val	Val	Gly	Arg	Phe	Asn	Glu	Arg	Phe	Ile	Leu	Ser	Leu	Ala
		20						25					30		
Ser	Cys	Lys	Lys	Cys	Leu	Val	Ile	Asp	Asp	Gln	Leu	Asn	Ile	Leu	Pro
	35						40					45			
Ile	Ser	Ser	His	Val	Ala	Thr	Met	Glu	Ala	Leu	Pro	Pro	Gln	Thr	Pro
	50					55					60				
Asp	Glu	Ser	Leu	Gly	Pro	Ser	Asp	Leu	Glu	Leu	Arg	Glu	Leu	Lys	Glu
65					70				75					80	
Ser	Leu	Gln	Asp	Thr	Gln	Pro	Val	Gly	Val	Leu	Val	Asp	Cys	Cys	Lys
			85					90					95		
Thr	Leu	Asp	Gln	Ala	Lys	Ala	Val	Leu	Lys	Phe	Ile	Glu	Gly	Ile	Ser
			100					105					110		
Glu	Lys	Thr	Leu	Arg	Ser	Thr	Val	Ala	Leu	Thr	Ala	Ala	Arg	Gly	Arg
		115					120					125			
Gly	Lys	Ser	Ala	Ala	Leu	Gly	Leu	Ala	Ile	Ala	Gly	Ala	Val	Ala	Phe
	130					135					140				
Gly	Tyr	Ser	Asn	Ile	Phe	Val	Thr	Ser	Pro	Ser	Pro	Asp	Asn	Leu	His
145					150					155				160	
Thr	Leu	Phe	Glu	Phe	Val	Phe	Lys	Gly	Phe	Asp	Ala	Leu	Gln	Tyr	Gln
			165					170					175		
Glu	His	Leu	Asp	Tyr	Glu	Ile	Ile	Gln	Ser	Leu	Asn	Pro	Glu	Phe	Asn
			180					185					190		
Lys	Ala	Val	Ile	Ile	Val	Asn	Val	Phe	Arg	Glu	His	Arg	Gln	Thr	Ile
	195					200						205			
Gln	Tyr	Ile	His	Pro	Ala	Asp	Ala	Val	Lys	Leu	Gly	Gln	Ala	Glu	Leu
	210					215					220				
Val	Val	Ile	Asp	Glu	Ala	Ala	Ile	Pro	Leu	Pro	Leu	Val	Lys	Ser	
225					230				235					240	
Leu	Leu	Gly	Pro	Tyr	Leu	Val	Phe	Met	Ala	Ser	Thr	Ile	Asn	Gly	Tyr
			245					250					255		
Glu	Gly	Thr	Gly	Arg	Ser	Leu	Ser	Leu	Lys	Leu	Ile	Gln	Gln	Leu	Arg
		260						265					270		
Gln	Gln	Ser	Ala	Gln	Ser	Gln	Val	Ser	Thr	Thr	Ala	Glu	Asn	Lys	Thr
		275					280					285			
Thr	Thr	Thr	Ala	Arg	Leu	Ala	Ser	Ala	Arg	Thr	Leu	His	Glu	Val	Ser
	290					295					300				
Leu	Gln	Glu	Ser	Ile	Arg	Tyr	Ala	Pro	Gly	Asp	Ala	Val	Glu	Lys	Trp
305					310				315					320	
Leu	Asn	Asp	Leu	Leu	Cys	Leu	Asp	Cys	Leu	Asn	Ile	Thr	Arg	Ile	Val

				325					330					335					
Ser	Gly	Cys	Pro	Leu	Pro	Glu	Ala	Cys	Glu	Leu	Tyr	Tyr	Val	Asn	Arg				
			340					345					350						
Asp	Thr	Leu	Phe	Cys	Tyr	His	Lys	Ala	Ser	Glu	Val	Phe	Leu	Gln	Arg				
		355					360					365							
Leu	Met	Ala	Leu	Tyr	Val	Ala	Ser	His	Tyr	Lys	Asn	Ser	Pro	Asn	Asp				
	370					375					380								
Leu	Gln	Met	Leu	Ser	Asp	Ala	Pro	Ser	His	His	Leu	Phe	Cys	Leu	Leu				
385					390					395				400					
Pro	Pro	Val	Pro	Pro	Thr	Gln	Asn	Ala	Leu	Pro	Lys	Val	Leu	Ala	Val				
			405					410					415						
Ile	Gln	Val																	

&lt;210&gt; 3555

&lt;211&gt; 1038

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3555

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180
atccggggag acaggaacac gggcaagaca gcgctgtggc accgcctgca gggccggccg
240
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360
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420
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480
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540
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600
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660
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720
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960
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1020

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1038

<210> 3556

<211> 333

<212> PRT

<213> Homo sapiens

<400> 3556

Met	Phe	Ser	Ala	Leu	Lys	Lys	Leu	Val	Gly	Ser	Asp	Gln	Ala	Pro	Gly
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Arg	Asp	Lys	Asn	Ile	Pro	Ala	Gly	Leu	Gln	Ser	Met	Asn	Gln	Ala	Leu
			20					25					30		
Gln	Arg	Arg	Phe	Ala	Lys	Gly	Val	Gln	Tyr	Asn	Met	Lys	Ile	Val	Ile
		35					40					45			
Arg	Gly	Asp	Arg	Asn	Thr	Gly	Lys	Thr	Ala	Leu	Trp	His	Arg	Leu	Gln
	50					55					60				
Gly	Arg	Pro	Phe	Val	Glu	Glu	Tyr	Ile	Pro	Thr	Gln	Glu	Ile	Gln	Val
65					70					75				80	
Thr	Ser	Ile	His	Trp	Ser	Tyr	Lys	Thr	Thr	Asp	Asp	Ile	Val	Lys	Val
			85						90					95	
Glu	Val	Trp	Asp	Val	Val	Asp	Lys	Gly	Lys	Cys	Lys	Lys	Arg	Gly	Asp
			100					105					110		
Gly	Leu	Lys	Met	Glu	Asn	Asp	Pro	Gln	Glu	Ala	Glu	Ser	Glu	Met	Ala
	115						120					125			
Leu	Asp	Ala	Glu	Phe	Leu	Asp	Val	Tyr	Lys	Asn	Cys	Asn	Gly	Val	Val
	130					135					140				
Met	Met	Phe	Asp	Ile	Thr	Lys	Gln	Trp	Thr	Phe	Asn	Tyr	Ile	Leu	Arg
145					150					155				160	
Glu	Leu	Pro	Lys	Val	Pro	Thr	His	Val	Pro	Val	Cys	Val	Leu	Gly	Asn
			165						170					175	
Tyr	Arg	Asp	Met	Gly	Glu	His	Arg	Val	Ile	Xaa	Cys	Arg	Thr	Xaa	Val
		180						185					190		
Arg	Asp	Phe	Ile	Asp	Asn	Leu	Asp	Arg	Pro	Pro	Gly	Ser	Ser	Tyr	Phe
	195					200					205				
Arg	Tyr	Ala	Glu	Ser	Ser	Met	Lys	Asn	Ser	Phe	Gly	Leu	Lys	Tyr	Leu
	210					215					220				
His	Lys	Phe	Phe	Asn	Ile	Pro	Phe	Leu	Gln	Leu	Gln	Arg	Glu	Thr	Leu
225				230					235					240	
Leu	Arg	Gln	Leu	Glu	Thr	Asn	Gln	Leu	Asp	Met	Asp	Ala	Thr	Leu	Glu
			245						250					255	
Glu	Leu	Ser	Val	Gln	Gln	Glu	Thr	Glu	Asp	Gln	Asn	Tyr	Gly	Ile	Phe
		260						265				270			
Leu	Glu	Met	Met	Glu	Ala	Arg	Ser	Arg	Gly	His	Ala	Ser	Pro	Leu	Ala
	275						280					285			
Ala	Asn	Gly	Gln	Ser	Pro	Ser	Pro	Gly	Ser	Gln	Ser	Pro	Val	Val	Pro
	290					295					300				
Ala	Gly	Ala	Val	Ser	Thr	Gly	Ser	Ser	Ser	Pro	Gly	Thr	Ala	Gln	Pro
305					310					315				320	
Ala	Pro	Gln	Leu	Pro	Leu	Asn	Gly	Cys	Pro	Thr	Ile	Leu			
			325						330						

<210> 3557

<211> 486

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3557

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120  
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180  
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240  
atcatcagcg gcagcagcgg cagcctgctg tcttcaggat ctggtgccag gagacactgc  
300  
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420  
ctgaagaagc tgtgtctccg agaagctgag ctcacgggca agctgccagt agaatatccc  
480  
ctggat  
486

&lt;210&gt; 3558

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3558

Ser	Val	Thr	Arg	Arg	Thr	Phe	Gly	His	Ser	Gly	Ile	Ala	Val	His	Thr
1				5				10						15	
Trp	Tyr	Ala	Cys	Pro	Ala	Leu	Ile	Lys	Ser	Ile	Trp	Ala	Met	Ala	Ile
			20					25					30		
Ser	Gln	His	Gln	Phe	Tyr	Leu	Asp	Arg	Lys	Gln	Ser	Lys	Ser	Lys	Ile
		35					40					45			
His	Ala	Ala	Arg	Ser	Leu	Ser	Glu	Ile	Ala	Ile	Asp	Leu	Thr	Glu	Thr
	50					55					60				
Gly	Thr	Leu	Lys	Thr	Ser	Lys	Leu	Ala	Asn	Met	Gly	Ser	Lys	Gly	Lys
65				70						75				80	
Ile	Ile	Ser	Gly	Ser	Ser	Gly	Ser	Leu	Leu	Ser	Ser	Gly	Ser	Gly	Ala
			85					90					95		
Arg	Arg	His	Cys	Ile	Leu	Leu	Pro	Gly	Ser	Gln	Glu	Ser	Asp	Ser	Ser
			100					105					110		
Gln	Ser	Ala	Lys	Lys	Asp	Met	Leu	Ala	Ala	Leu	Lys	Ser	Arg	Gln	Glu
		115					120					125			
Ala	Leu	Glu	Glu	Thr	Leu	Arg	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Lys	Leu
	130					135					140				
Cys	Leu	Arg	Glu	Ala	Glu	Leu	Thr	Gly	Lys	Leu	Pro	Val	Glu	Tyr	Pro
145					150					155					160
Leu	Asp														

&lt;210&gt; 3559

&lt;211&gt; 673

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3559

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 300  
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 360  
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 420  
 ccagttattg tggagtcatt aaaatgtctg tgtaatatag tgttcaacag tcagatggca  
 480  
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 540  
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 600  
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 673

&lt;210&gt; 3560

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3560

Met	Asp	Glu	Glu	Arg	Ala	Leu	Tyr	Ile	Val	Arg	Ala	Gly	Glu	Ala	Gly	1	5	10	15
Ala	Ile	Glu	Arg	Val	Leu	Arg	Asp	Tyr	Ser	Asp	Lys	His	Arg	Ala	Thr	20	25	30	
Phe	Lys	Phe	Glu	Ser	Thr	Asp	Glu	Asp	Lys	Arg	Lys	Lys	Leu	Cys	Glu	35	40	45	
Gly	Ile	Phe	Lys	Val	Leu	Ile	Lys	Asp	Ile	Pro	Thr	Thr	Cys	Gln	Val	50	55	60	
Ser	Cys	Leu	Glu	Val	Leu	Arg	Ile	Leu	Ser	Arg	Asp	Lys	Lys	Val	Leu	65	70	75	80
Val	Pro	Val	Thr	Thr	Lys	Glu	Asn	Met	Gln	Ile	Leu	Leu	Arg	Leu	Ala	85	90	95	
Lys	Leu	Asn	Glu	Leu	Asp	Asp	Ser	Leu	Glu	Lys	Val	Ser	Glu	Phe	Pro	100	105	110	
Val	Ile	Val	Glu	Ser	Leu	Lys	Cys	Leu	Cys	Asn	Ile	Val	Phe	Asn	Ser	115	120	125	
Gln	Met	Ala	Gln	Gln	Leu	Ser	Leu	Glu	Leu	Asn	Leu	Ala	Ala	Lys	Leu	130	135	140	
Cys	Asn	Leu	Leu	Arg	Lys	Cys	Lys	Asp	Arg	Lys	Phe	Ile	Asn	Asp	Ile				

145                      150                      155                      160  
 Lys Cys Phe Asp Leu Arg Leu Leu Phe Leu Leu Ser Leu Leu His Thr  
                                  165                      170                      175  
 Asp Ile Arg Ser Gln Leu Arg Tyr Glu Leu Gln Gly Leu Pro Leu Leu  
                                  180                      185                      190  
 Thr Gln Ile  
                                  195

<210> 3561  
 <211> 523  
 <212> DNA  
 <213> Homo sapiens

<400> 3561  
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 120  
 ggagggcatg agacgcctat tgcagagctg ctcaccagaa ggtcacagga atttagaaga  
 180  
 gaagctccta cctgcccccg atcatgcacg tggccactga ggatgccaga cgaggtgatg  
 240  
 ctggtctcat agagaatgta cccgaaggac tgtccatttc cccattgac tggcaggttc  
 300  
 tccatgttga tgggcttttc agacttgatt ggctgcgtac agaagagatg gaggggtggg  
 360  
 caggctcagg aggagtgggg tcacagacag actctgcttg ggggctggca catgggggtgg  
 420  
 aagcggaggt ttggtgggtg ttttctactt tgacttctca ttgcactaaa catacaactc  
 480  
 tccaggggtga cggggaagag gagtggggca aaggggtgtg cac  
 523

<210> 3562  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 3562  
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                                   20                                  25                                  30  
 Leu His Val Asp Gly Leu Phe Arg Leu Asp Trp Leu Arg Thr Glu Glu  
                                   35                                  40                                  45  
 Met Glu Gly Trp Ala Gly Ser Gly Gly Val Gly Ser Gln Thr Asp Ser  
                                   50                                  55                                  60  
 Ala Trp Gly Leu Ala His Gly Val Glu Ala Glu Val Trp Trp Val Phe  
 65                                  70                                  75                                  80  
 Ser Thr Leu Thr Ser His Cys Thr Lys His Thr Thr Leu Gln Gly Asp  
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 Gly Glu Glu Glu Trp Gly Lys Gly Val Cys  
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Cys Val Arg Ile Leu Leu Asp Pro Tyr Ser Arg Met Pro Ala Ser Ser  
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&lt;210&gt; 3566

&lt;211&gt; 193

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3566

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&lt;210&gt; 3567

&lt;211&gt; 2811

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3567

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2811

&lt;210&gt; 3568

&lt;211&gt; 869

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3568

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			20					25					30		
Phe	Gln	Lys	Gln	Leu	Arg	Gly	Gln	Ile	Ala	Arg	Arg	Val	Tyr	Arg	Gln
		35					40					45			
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2726

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 Gln Ala Asn Pro Gln Asn Ala Val Gly Thr Leu Asp Val Gly Leu Ile  
 565 570 575  
 Asp Ser Val Cys Ala Ser Asp Ser Pro Asp Arg Pro Asn Ser Phe Val  
 580 585 590  
 Ile Ile Thr Ala Asn Arg Val Leu His Cys Asn Ala Asp Thr Pro Glu  
 595 600 605  
 Glu Met His His Trp Ile Thr Leu Leu Gln Arg Ser Lys Gly Asp Thr  
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&lt;210&gt; 3569

&lt;211&gt; 5070

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3569

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<210> 3570

<211> 893

<212> PRT

<213> Homo sapiens

<400> 3570

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Arg	Ala	Pro	Ser	Pro	Pro	Trp	Pro	Pro	Gln	Gly	Pro	Leu	Ser	Pro	Gly	35	40	45	
Pro	Gly	Ser	Leu	Pro	Leu	Ser	Ile	Ala	Arg	Val	Gln	Thr	Pro	Pro	Trp	50	55	60	
His	Pro	Pro	Gly	Ala	Pro	Ser	Pro	Gly	Leu	Leu	Gln	Asp	Ser	Asp	Ser	65	70	75	80
Leu	Ser	Gly	Ser	Tyr	Leu	Asp	Pro	Asn	Tyr	Gln	Ser	Ile	Lys	Trp	Gln	85	90	95	
Pro	His	Gln	Gln	Asn	Lys	Trp	Ala	Thr	Leu	Tyr	Asp	Ala	Asn	Tyr	Lys	100	105	110	
Glu	Leu	Pro	Met	Leu	Thr	Tyr	Arg	Val	Asp	Ala	Asp	Lys	Gly	Phe	Asn	115	120	125	
Phe	Ser	Val	Gly	Asp	Asp	Ala	Phe	Val	Cys	Gln	Lys	Lys	Asn	His	Phe	130	135	140	
Gln	Val	Thr	Val	Tyr	Ile	Gly	Met	Leu	Gly	Glu	Pro	Lys	Tyr	Val	Lys	145	150	155	160
Thr	Pro	Glu	Gly	Leu	Lys	Pro	Leu	Asp	Cys	Phe	Tyr	Leu	Lys	Leu	His	165	170	175	
Gly	Val	Lys	Leu	Glu	Ala	Leu	Asn	Gln	Ser	Ile	Asn	Ile	Glu	Gln	Ser	180	185	190	
Gln	Ser	Asp	Arg	Ser	Lys	Arg	Pro	Phe	Asn	Pro	Val	Thr	Val	Asn	Leu	195	200	205	
Pro	Pro	Glu	Gln	Val	Thr	Lys	Val	Thr	Val	Gly	Arg	Leu	His	Phe	Ser	210	215	220	
Glu	Thr	Thr	Ala	Asn	Asn	Met	Arg	Lys	Lys	Gly	Lys	Pro	Asn	Pro	Asp	225	230	235	240
Gln	Arg	Tyr	Phe	Met	Leu	Val	Val	Ala	Leu	Gln	Ala	His	Ala	Gln	Asn	245	250	255	
Gln	Asn	Tyr	Thr	Leu	Ala	Ala	Gln	Ile	Ser	Glu	Arg	Ile	Ile	Val	Arg	260	265	270	
Ala	Ser	Asn	Pro	Gly	Gln	Phe	Glu	Ser	Asp	Ser	Asp	Val	Leu	Trp	Gln	275	280	285	
Arg	Ala	Gln	Val	Pro	Asp	Thr	Val	Phe	His	His	Gly	Arg	Val	Gly	Ile	290	295	300	
Asn	Thr	Asp	Arg	Pro	Asp	Glu	Ala	Leu	Val	Val	His	Gly	Asn	Val	Lys	305	310	315	320
Val	Met	Gly	Ser	Leu	Met	His	Pro	Ser	Asp	Leu	Arg	Ala	Lys	Glu	His	325	330	335	
Val	Gln	Glu	Val	Asp	Thr	Thr	Glu	Gln	Leu	Lys	Arg	Ile	Ser	Arg	Met				

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Arg Leu Val His Tyr Arg Tyr Lys Pro Glu Phe Ala Ala Ser Ala Gly  
355 360 365  
Ile Glu Ala Thr Ala Pro Glu Thr Gly Val Ile Ala Gln Glu Val Lys  
370 375 380  
Glu Ile Leu Pro Glu Ala Val Lys Asp Thr Gly Asp Met Val Phe Ala  
385 390 395 400  
Asn Gly Lys Thr Ile Glu Asn Phe Leu Val Val Asn Lys Glu Arg Ile  
405 410 415  
Phe Met Glu Asn Val Gly Ala Val Lys Glu Leu Cys Lys Leu Thr Asp  
420 425 430  
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435 440 445  
Ala Lys Leu Arg Arg Leu Asp Ser Leu Lys Ser Thr Gly Ser Ser Gly  
450 455 460  
Ala Phe Ser His Ala Gly Ser Gln Phe Ser Arg Ala Gly Ser Val Pro  
465 470 475 480  
His Lys Lys Arg Pro Pro Lys Val Ala Ser Lys Ser Ser Ser Val Val  
485 490 495  
Pro Asp Gln Ala Cys Ile Ser Gln Arg Phe Leu Gln Gly Thr Ile Ile  
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Ala Leu Val Val Val Met Ala Phe Ser Val Val Ser Met Ser Thr Leu  
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Ser Phe Ala Val Ser Thr Ser Cys Leu Leu Ala Leu Leu Arg Pro Gln  
545 550 555 560  
Pro Pro Gly Gly Ser Glu Ala Leu Cys Pro Trp Ser Ser Gln Ser Phe  
565 570 575  
Gly Thr Thr Gln Leu Arg Gln Ser Pro Leu Thr Thr Gly Leu Pro Gly  
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Ile Gln Pro Ser Leu Leu Leu Val Thr Thr Ser Leu Thr Ser Ser Ala  
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Pro Gly Ser Ala Val Arg Thr Leu Asp Met Cys Ser Ser His Pro Cys  
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Pro Val Ile Cys Cys Ser Ser Pro Thr Thr Asn Pro Thr Thr Gly Pro  
625 630 635 640  
Ser Leu Gly Pro Ser Phe Asn Pro Gly His Val Leu Ser Pro Ser Pro  
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675 680 685  
Asp His Ser Lys His His Lys Ser Leu Glu Pro Leu Ala Ser Pro Ala  
690 695 700  
Val Pro Phe Pro Gly Gly Gln Gly Lys Ala Lys Asn Ser Pro Ser Leu  
705 710 715 720  
Gly Phe His Gly Arg Ala Arg Arg Gly Ala Leu Gln Ser Ser Val Gly  
725 730 735  
Pro Ala Glu Pro Thr Trp Ala Gln Gly Gln Ser Ala Ser Leu Leu Ala  
740 745 750  
Glu Pro Val Pro Ser Leu Thr Ser Ile Gln Val Leu Glu Asn Ser Met  
755 760 765  
Ser Ile Thr Ser Gln Tyr Cys Ala Pro Gly Asp Ala Cys Arg Pro Gly

770	775	780
Asn Phe Thr Tyr His Ile	Pro Val Ser Ser Gly Thr	Pro Leu His Leu
785	790	795
Ser Leu Thr Leu Gln Met	Asn Ser Ser Ser Pro Val	Ser Val Val Leu
805	810	815
Cys Ser Leu Arg Ser Lys	Glu Glu Pro Cys Glu Glu	Gly Ser Leu Pro
820	825	830
Gln Ser Leu His Thr His	Gln Asp Thr Gln Gly Thr	Ser His Arg Trp
835	840	845
Pro Ile Thr Ile Leu Ser	Phe Arg Glu Phe Thr Tyr	His Phe Arg Val
850	855	860
Ala Leu Leu Gly Gln Ala	Asn Cys Ser Ser Glu Ala	Leu Ala Gln Pro
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Ala Thr Asp Tyr His Phe	His Phe Tyr Arg Leu	Cys Asp
885	890	

<210> 3571  
 <211> 528  
 <212> DNA  
 <213> Homo sapiens

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 360  
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 420  
 ctgctgttac cagaagaggg atccaggcca cacggaaggg agtcgtgtcg tggtttaccc  
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<210> 3572  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 3572  
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 Ser Tyr Phe Leu Phe Val Ile Phe Thr Ala Tyr Ala Met Leu Pro Leu  
 35 40 45  
 Gly Met Arg Asp Ala Ala Val Ala Gly Leu Ala Ser Ser Leu Ser His

50		55		60											
Leu	Leu	Val	Leu	Gly	Leu	Tyr	Leu	Gly	Pro	Gln	Pro	Asp	Ser	Arg	Pro
65			70					75			80				
Ala	Leu	Leu	Pro	Gln	Val	Ser	Thr	Gln	Val	Ala	Gln	Ala	Ala	Leu	Arg
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Thr	Ala	Leu	Pro	Arg	Ala	Ser	Arg	Leu	Leu	Leu	Gly	Gly	Cys		
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&lt;210&gt; 3573

&lt;211&gt; 1236

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3573

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120
ccctgcctgc tccccaaagc ccagccttca gccccccaa tcaatcccag ccacacacac
180
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240
gcttcacata cccacacact cacagccaca aaccccagaa gtcatgcaca tgccgacgca
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<210> 3574

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3574

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			20					25					30		
Ile	Asn	Pro	Ser	His	Thr	His	Ser	Pro	Ile	Phe	Ser	Ile	His	Ser	Gly
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Thr	Cys	Val	Phe	Asn	Lys	Pro	Gly	Gly	His	Thr	Ala	Ser	His	Thr	His
	50					55					60				
Thr	Leu	Thr	Ala	Thr	Asn	Pro	Arg	Ser	His	Ala	His	Ala	Asp	Ala	Pro
65					70					75					80
Cys	Gly	Thr	Cys	Thr	His	Asn	His	Thr	Cys	Val	Gln	Ser	Gly	Arg	His
				85					90					95	
Thr	His	Thr	Cys	Ile	Glu	Ala	Ser	Leu	Trp	Thr	Pro	Ser	Ala	Ser	His
			100					105					110		
Arg	Gly	Gly	Ser	Pro	Ala	Val	Phe	Asp	Trp	Phe	Phe	Glu	Ala	Ala	Cys
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Pro	Ala	Ser	Val	Gln	Glu	Asp	Pro	Pro	Ile	Leu	Arg	Gln	Phe	Pro	Pro
	130					135					140				
Asp	Phe	Arg	Asp	Gln	Glu	Ala	Met	Gln	Met	Val	Pro	Lys	Phe	Cys	Phe
145					150					155					160
Pro	Phe	Asp	Val	Glu	Arg	Gly	Pro	Pro	Ser	Pro	Ala	Val	Gln	His	Phe
				165					170					175	
Thr	Phe	Ala	Leu	Thr	Asp	Leu	Ala	Gly	Asn	Arg	Arg	Phe	Gly	Phe	Cys
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Arg	Leu	Arg	Ala	Gly	Thr	Gln	Ser	Cys	Leu	Cys	Ile	Leu	Ser	His	Leu
		195					200					205			
Pro	Trp	Phe	Glu	Val	Phe	Tyr	Lys	Leu	Leu	Asn	Thr	Val	Gly	Asp	Leu
	210					215					220				
Leu	Ala	Gln	Asp	Gln	Val	Thr	Glu	Ala	Glu	Glu	Leu	Leu	Gln	Asn	Leu
225					230					235					240
Phe	Gln	Gln	Ser	Leu	Ser	Gly	Pro	Gln	Ala	Ser	Val	Gly	Leu	Glu	Leu
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Gly	Ser	Gly	Val	Thr	Val	Ser	Ser	Gly	Gln	Gly	Ile	Pro	Pro	Pro	Thr
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Arg	Gly	Asn	Ser	Lys	Pro	Leu	Ser	Cys	Phe	Val	Ala	Pro	Asp	Ser	Gly
		275					280					285			
Arg	Leu	Pro	Ser	Ile	Pro	Glu	Asn	Arg	Asn	Leu	Thr	Glu	Leu	Val	Val
	290					295					300				
Ala	Val	Thr	Asp	Glu	Asn	Ile	Val	Gly	Leu	Phe	Ala	Ala	Leu	Leu	Ala
305					310					315					320
Glu	Arg	Arg	Val	Leu	Leu	Thr	Ala	Ser	Lys	Leu	Ser	Thr	Leu	Arg	Arg
				325					330				335		
Gly	Pro	Pro	Gly	Arg	Gly	Gly	Ser	Arg	Ala	Trp	Leu	Arg	Pro	Gly	Gly
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355

360

<210> 3575  
 <211> 769  
 <212> DNA  
 <213> Homo sapiens

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 180  
 tttggatcac ctgaccagaa gacggagtct gagaaacagg attattaaca gatgtagagg  
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 cactagaagg caccatgtaa cttgctggat ttggagtgtg acttcttctt ctgggagcag  
 300  
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 360  
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 420  
 tctggaaaat aaaatgcaaa cattcatttg gaagaaacat catctttggg atcgtaagtg  
 480  
 caaagatgaa ggaaataatt ttatcttggt ttgttgtaga aaaagctctg attaaagcaa  
 540  
 atgtaaagtt tcttttttca aatgtactta tttccaaata tgtagcaga tttactgcaa  
 600  
 gaatagtctc ctccatatca aggtttacat caggaaattt aatagcaaga gtgacaaaaa  
 660  
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 <211> 205  
 <212> PRT  
 <213> Homo sapiens

<400> 3576  
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 Ser Thr Thr Lys Gln Asp Lys Ile Ile Ser Phe Ile Phe Ala Leu Thr  
 35 40 45  
 Ile Pro Lys Met Met Phe Leu Pro Asn Glu Cys Leu His Phe Ile Phe  
 50 55 60  
 Gln Thr Cys Ser Leu Lys Pro Ile Ile Ala Pro Leu Arg Asn Ile Phe  
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 Thr Ser Ser Ser Gly Met Ser Leu Ser Ala Gly Ser Ser Pro Leu His  
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120  
gtgattgggg agagcatgta cggggacttt gaggaagctt ttgaccatct gcagaacaga  
180  
ctgatcgcca ccaagaaccc agaagaaatc agaggcgggg gacttctcaa gtacagcaac  
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<210> 3578  
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 <212> PRT  
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 20 25 30  
 Ile Ser Glu His Phe His Pro Thr Val Ile Gly Glu Ser Met Tyr Gly  
 35 40 45  
 Asp Phe Glu Glu Ala Phe Asp His Leu Gln Asn Arg Leu Ile Ala Thr  
 50 55 60  
 Lys Asn Pro Glu Glu Ile Arg Gly Gly Gly Leu Leu Lys Tyr Ser Asn  
 65 70 75 80  
 Leu Leu Val Arg Asp Phe Arg Pro Thr Asp Gln Glu Glu Ile Lys Thr  
 85 90 95  
 Leu Glu Arg Tyr Met Cys Ser Arg Phe Phe Ile Asp Phe Pro Asp Ile  
 100 105 110  
 Leu Glu Gln Gln Arg Lys Leu Glu Thr Tyr Leu Gln Asn His Phe Ala  
 115 120 125  
 Glu Glu Glu Arg Ser Lys Tyr Asp Tyr Leu Met Ile Leu Arg Arg Val  
 130 135 140  
 Val Asn Glu Ser Thr Val Cys Leu Met Gly His Glu Arg Arg Gln Thr  
 145 150 155 160  
 Leu Asn Leu Ile Ser Leu Leu Ala Leu Arg Val Leu Gly Gly Thr Lys  
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 180 185 190  
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<210> 3579  
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 180



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 420  
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<210> 3580  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 3580  
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 Glu Thr Lys Gln His Glu Lys Trp Leu Ser Gln Pro Thr Cys Ser Asp  
 35 40 45  
 Met Pro Arg Asn Phe Ser Ser Gly Pro Gly Ser Gly Gly Leu Leu Ile  
 50 55 60  
 Phe Ser Gln Asp Ile Val Leu Ser Trp Asn Leu Ala Gly Gly Trp Ser  
 65 70 75 80  
 Ile Cys Ile Trp Ser Ile Ala Arg Leu Ser His Leu Ser Ser Asp Gln  
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<210> 3581  
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&lt;210&gt; 3584

&lt;211&gt; 356

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3584

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3585

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2746



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&lt;210&gt; 3588

&lt;211&gt; 499

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3588

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<212> DNA
<213> Homo sapiens
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 <212> PRT  
 <213> Homo sapiens

<400> 3590  
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 Asp Pro Met Ser Pro Phe His Leu Ser Ser Val Ile Leu Cys Arg Pro  
 35 40 45  
 Ser Ala Trp Pro Cys Leu Arg Ser Ser Ser Pro Pro Ala Ala Gln Gly  
 50 55 60  
 Ser Phe Val Ser Ala Gln Glu Gly Pro Tyr Asn Pro Ser Trp Leu Trp  
 65 70 75 80  
 Pro Gly Pro Cys Phe Val Ser Glu Leu Gly Gly Pro Ile Pro Lys His  
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 Phe Thr His Ile Ser  
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<210> 3591  
 <211> 669  
 <212> DNA  
 <213> Homo sapiens

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 <213> Homo sapiens

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 Pro Gly His Val Asp Phe Thr Ile Glu Val Glu Arg Ala Leu Arg Val  
 130 135 140  
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 145 150 155 160  
 Gln Thr Met Thr Val Asn Arg Gln Met Lys Arg Tyr Asn Val Pro Phe  
 165 170 175  
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 180 185 190  
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<210> 3593  
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<212> DNA  
<213> Homo sapiens

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<213> Homo sapiens

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35 40 45  
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Pro Leu Thr Pro Leu Gln Glu Glu Met Ala Ser Leu Leu Gln Gln Ile		
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Glu Ile Glu Arg Ser Leu Tyr Ser Asp His Glu Leu Arg Ala Leu Asp		80
	85	90
Glu Asn Gln Arg Leu Ala Lys Lys Lys Ala Asp Leu His Asp Glu Glu		95
	100	105
Asp Glu Gln Asp Ile Leu Leu Ala Gln Asp Leu Glu Asp Met Trp Glu		110
	115	120
Gln Lys Phe Leu Gln Phe Lys Leu Gly Ala Arg Ile Thr Glu Ala Asp		125
	130	135
Glu Lys Asn Asp Arg Thr Ser Leu Asn Arg Lys Leu Asp Arg Asn Leu		140
145	150	155
Val Leu Leu Val Arg Glu Lys Phe Gly Asp Gln Asp Val Trp Ile Leu		160
	165	170
Pro Gln Ala Glu Trp Gln Pro Gly Glu Thr Leu Arg Gly Thr Ala Glu		175
	180	185
Arg Thr Leu Ala Thr Leu Ser Glu Asn Asn Met Glu Ala Lys Phe Leu		190
	195	200
Gly Asn Ala Pro Cys Gly His Tyr Thr Phe Lys Phe Pro Gln Ala Met		205
	210	215
Arg Thr Glu Ser Asn Leu Gly Ala Lys Val Phe Phe Phe Lys Ala Leu		220
225	230	235
Leu Leu Thr Gly Asp Phe Ser Gln Ala Gly Asn Lys Gly His His Val		240
	245	250
Trp Val Thr Lys Asp Glu Leu Gly Asp Tyr Leu Lys Pro Lys Tyr Leu		255
	260	265
Ala Gln Val Arg Arg Phe Val Ser Asp Leu		270
	275	280

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 <211> 1903  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 3596

&lt;211&gt; 496

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3596

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Gln Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu  
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Ala His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro Ile  
50 55 60  
Val Glu Ser Tyr Ile Gly Phe Ile Glu Ser Tyr Arg Asp Pro Phe Gly  
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Ser Arg Gly Glu Phe Glu Gly Phe Val Ala Val Val Asn Lys Ala Met  
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Ser Ala Lys Phe Glu Arg Leu Val Ala Ser Ala Glu Gln Leu Leu Lys  
100 105 110  
Glu Leu Pro Trp Pro Pro Thr Phe Glu Lys Asp Lys Phe Leu Thr Pro  
115 120 125  
Asp Phe Thr Ser Leu Asp Val Leu Thr Phe Ala Gly Ser Gly Ile Pro  
130 135 140  
Ala Gly Ile Asn Ile Pro Asn Tyr Asp Asp Leu Arg Gln Thr Glu Gly  
145 150 155 160  
Phe Lys Asn Val Ser Leu Gly Asn Val Leu Ala Val Ala Tyr Ala Thr  
165 170 175  
Gln Arg Glu Lys Leu Thr Phe Leu Glu Glu Asp Asp Lys Asp Leu Tyr  
180 185 190  
Ile Leu Trp Lys Gly Pro Ser Phe Asp Val Gln Val Gly Leu His Glu  
195 200 205  
Leu Leu Gly His Gly Ser Gly Lys Leu Phe Val Gln Asp Glu Lys Gly  
210 215 220  
Ala Phe Asn Phe Asp Gln Glu Thr Val Ile Asn Pro Glu Thr Gly Glu  
225 230 235 240  
Gln Ile Gln Ser Trp Tyr Arg Ser Gly Glu Thr Trp Asp Ser Lys Phe  
245 250 255  
Ser Thr Ile Ala Ser Ser Tyr Glu Glu Cys Arg Ala Glu Ser Val Gly  
260 265 270  
Leu Tyr Leu Cys Leu His Pro Gln Val Leu Glu Ile Phe Gly Phe Glu  
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Arg Ala Gly Leu Leu Ala Leu Glu Phe Tyr Thr Pro Glu Ala Phe Asn  
305 310 315 320  
Trp Arg Gln Ala His Met Gln Ala Arg Phe Val Ile Leu Arg Val Leu  
325 330 335  
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Asp Gly Arg Pro Asp Ala Arg Val Arg Leu Asp Arg Ser Lys Ile Arg  
355 360 365  
Ser Val Gly Lys Pro Ala Leu Glu Arg Phe Leu Arg Arg Leu Gln Val  
370 375 380  
Leu Lys Ser Thr Gly Asp Val Ala Gly Gly Arg Ala Leu Tyr Glu Gly  
385 390 395 400  
Tyr Ala Thr Val Thr Asp Ala Pro Pro Glu Cys Phe Leu Thr Leu Arg  
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<210> 3598

<211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 3598

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Asp Tyr Asn Lys Asp Asp Met Ser Tyr Arg Arg Ile Ser Ala Val Glu
      35           40           45
Pro Lys Thr Ala Leu Pro Phe Asn Arg Phe Leu Pro Asn Lys Ser Arg
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Gln Pro Ser Tyr Val Pro Ala Pro Leu Arg Lys Lys Lys Pro Asp Lys
65           70           75           80
His Glu Asp Asn Arg Arg Ser Trp Ala Ser Pro Val Tyr Thr Glu Ala
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Asp Gly Thr Phe Ser Arg Ser Lys Ser Met Ser Asp Val Ser Ala Glu
      100          105          110
Asp Val Gln Asn Leu Arg Gln Leu Arg Tyr Glu Glu Met Gln Lys Ile
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Lys Ser Gln Leu Lys Glu Gln Asp Gln Lys Trp Gln Asp Asp Leu Ala
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 <212> DNA  
 <213> Homo sapiens

<400> 3599

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<213> Homo sapiens

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Pro Arg Pro Leu Ser Val Pro Ile Glu His Leu Leu Gly Ala Lys Asn  
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Cys Cys Arg His Gly Gly Gln Trp Val Arg Arg Ala Val Pro Ala Val  
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<210> 3601  
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<212> DNA  
<213> Homo sapiens

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<210> 3602  
 <211> 299  
 <212> PRT  
 <213> Homo sapiens

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 Phe Val Ser Arg Ala Leu Lys Trp Ser Ser Gly Gly Ser Gly Lys Leu  
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 Cys Leu Lys Asn Lys Ser Ser Ala Ser Val Val Phe Thr Thr Tyr Thr  
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 Gln Lys His Pro Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro Leu

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Thr Val Phe Thr Val	Leu Cys Glu Gln Tyr Gln	Pro Ser Leu Arg Arg			
225	230	235	240		
Asp Pro Met Tyr Asn	Glu Tyr Leu Asp Arg Ile	Gly Gln Leu Phe Phe			
	245	250	255		
Gly Val Pro Pro Lys	Gln Thr Ser Ser Tyr Gly	Gly Leu Leu Gly Asn			
	260	265	270		
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Ser Pro Ser Asp Gly	Ser Pro Ile Glu Leu Asp				
290	295				

&lt;210&gt; 3603

&lt;211&gt; 1082

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3603

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 <212> PRT  
 <213> Homo sapiens

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 Pro Pro Thr Asn Ala Ala Pro Thr Val Pro Gly Pro Val Glu Pro Leu  
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 <213> Homo sapiens

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2004

&lt;210&gt; 3606

<211> 324  
 <212> PRT  
 <213> Homo sapiens

<400> 3606  
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 35 40 45  
 Arg Tyr Met Ser Gln Ser Lys His Thr Glu Ala Arg Glu Leu Met Tyr  
 50 55 60  
 Ser Gly Ala Leu Leu Phe Phe Ser His Gly Gln Gln Asn Ser Ala Ala  
 65 70 75 80  
 Asp Leu Ser Met Leu Val Leu Glu Ser Leu Glu Lys Ala Glu Val Glu  
 85 90 95  
 Val Ala Asp Glu Leu Leu Glu Asn Leu Ala Lys Val Phe Ser Leu Met  
 100 105 110  
 Asp Pro Asn Ser Pro Glu Arg Val Thr Phe Val Ser Arg Ala Leu Lys  
 115 120 125  
 Trp Ser Ser Gly Gly Ser Gly Lys Leu Gly His Pro Arg Leu His Gln  
 130 135 140  
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 Tyr His Phe Leu His Ser Ala Asp Gly Glu Gly Cys Ala Asn Met Leu  
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 Val Glu Tyr Ser Thr Ser Arg Gly Phe Arg Ser Glu Val Asp Met Phe  
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 Val Ala Gln Ala Val Leu Gln Phe Leu Cys Leu Lys Asn Lys Ser Ser  
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 Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro Ser Ile Glu  
 210 215 220  
 Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile Trp Phe Leu  
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 Leu Leu Ala Val Asp Gly Gly Lys Leu Thr Val Phe Thr Val Leu Cys  
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 Glu Gln Tyr Gln Pro Ser Leu Arg Arg Asp Pro Met Tyr Asn Glu Tyr  
 260 265 270  
 Leu Asp Arg Ile Gly Gln Leu Phe Phe Gly Val Pro Pro Lys Gln Thr  
 275 280 285  
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<210> 3607  
 <211> 1726  
 <212> DNA  
 <213> Homo sapiens

<400> 3607

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<210> 3608  
 <211> 436  
 <212> PRT  
 <213> Homo sapiens

<400> 3608  
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 Glu Val Lys Trp Ser Val Arg Met Thr Leu Cys Ala Gly Ile Cys Ser  
 35 40 45  
 Tyr Glu Gly Lys Gly Gly Met Cys Ser Ile Arg Leu Ser Glu Pro Leu  
 50 55 60  
 Leu Lys Leu Arg Pro Arg Lys Asp Leu Val Glu Thr Leu Leu His Glu  
 65 70 75 80  
 Met Ile His Ala Tyr Leu Phe Val Thr Asn Asn Asp Lys Asp Arg Glu  
 85 90 95  
 Gly His Gly Pro Glu Phe Cys Lys His Met His Arg Ile Asn Ser Leu  
 100 105 110  
 Thr Gly Ala Asn Ile Thr Val Tyr His Thr Phe His Asp Glu Val Asp  
 115 120 125  
 Glu Tyr Arg Arg His Trp Trp Arg Cys Asn Gly Pro Cys Gln His Arg  
 130 135 140  
 Pro Pro Tyr Tyr Gly Tyr Val Lys Arg Ala Thr Asn Arg Glu Pro Ser  
 145 150 155 160  
 Ala His Asp Tyr Trp Trp Ala Glu His Gln Lys Thr Cys Gly Gly Thr  
 165 170 175  
 Tyr Ile Lys Ile Lys Glu Pro Glu Asn Tyr Ser Lys Lys Gly Lys Gly  
 180 185 190  
 Lys Ala Lys Leu Gly Lys Glu Pro Val Leu Ala Ala Glu Asn Lys Asp  
 195 200 205  
 Lys Pro Asn Arg Gly Glu Ala Gln Leu Val Ile Pro Phe Ser Gly Lys  
 210 215 220  
 Gly Tyr Val Leu Gly Glu Thr Ser Asn Leu Pro Ser Pro Gly Lys Leu  
 225 230 235 240  
 Ile Thr Ser His Ala Ile Asn Lys Thr Gln Asp Leu Leu Asn Gln Asn  
 245 250 255  
 His Ser Ala Asn Ala Val Arg Pro Asn Ser Lys Ile Lys Val Lys Phe  
 260 265 270  
 Glu Gln Asn Gly Ser Ser Lys Asn Ser His Leu Val Ser Pro Ala Val  
 275 280 285  
 Ser Asn Ser His Gln Asn Val Leu Ser Asn Tyr Phe Pro Arg Val Ser  
 290 295 300  
 Phe Ala Asn Gln Lys Ala Phe Arg Gly Val Asn Gly Ser Pro Arg Ile  
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<212> PRT
<213> Homo sapiens
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<210> 3611
<211> 816
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3611

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 816

&lt;210&gt; 3612

&lt;211&gt; 272

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3612

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			20					25					30		
Lys	Val	Lys	Pro	Arg	Lys	Ile	Phe	Gln	Trp	Arg	Gln	Leu	Glu	Asn	Leu
			35				40					45			
Tyr	Phe	Arg	Glu	Lys	Lys	Phe	Ser	Val	Glu	Val	His	Asp	Pro	Arg	Arg
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65					70				75					80	
Thr	Trp	Tyr	Ala	Cys	Pro	Ala	Leu	Ile	Lys	Ser	Ile	Trp	Ala	Met	Ala
				85				90					95		
Ile	Ser	Gln	His	Gln	Phe	Tyr	Leu	Asp	Arg	Lys	Gln	Ser	Lys	Ser	Lys
			100					105					110		
Ile	His	Ala	Ala	Arg	Ser	Leu	Ser	Glu	Ile	Ala	Ile	Asp	Leu	Thr	Glu



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Lys	Ile	Ile	Ser	Gly	Ser	Ser	Gly	Ser	Leu	Leu	Ser	Ser	Gly	Ser	Gln				
145					150					155					160				
Glu	Ser	Asp	Ser	Ser	Gln	Ser	Ala	Lys	Lys	Asp	Met	Leu	Ala	Ala	Leu				
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Lys	Ser	Arg	Gln	Glu	Ala	Leu	Glu	Glu	Thr	Leu	Arg	Gln	Arg	Leu	Glu				
		180						185				190							
Glu	Leu	Lys	Lys	Leu	Cys	Leu	Arg	Glu	Ala	Glu	Leu	Thr	Gly	Lys	Leu				
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Pro	Val	Glu	Tyr	Pro	Leu	Asp	Pro	Gly	Glu	Glu	Pro	Pro	Ile	Val	Arg				
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Arg	Arg	Ile	Gly	Thr	Ala	Phe	Lys	Leu	Asp	Glu	Gln	Lys	Ile	Leu	Pro				
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 <211> 659  
 <212> DNA  
 <213> Homo sapiens

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 acactccagg tggtgcacgg cccaccaaaag cggaagata gggcagttgc tcagacaaaa  
 240  
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 420  
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<210> 3614  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 3614

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Met Gln Ser Val Thr Arg Pro Gly Ile Pro Met Cys Ala Gln Leu Ala
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His Ser Ile Ile Val Pro Arg Lys Leu Leu Gln Phe Ile Lys Ser Ser
          20           25           30
Gly Leu Gly Ile Ser Leu Asn Ser Lys Arg Arg Lys Glu Glu Thr Phe
          35           40           45
Pro Thr Arg Cys Gly Cys Asp Ala Ser Gln Gly Pro Gln Gly His Cys
          50           55           60
Pro Arg Ala His Arg Pro Pro Leu Thr Ala Thr Gly Ala Trp Ile Arg
65           70           75           80
Ser Tyr Ile Val Gln Ser Phe Arg Pro Leu Pro Trp Ser Thr Arg Thr
          85           90           95
Arg Ala Arg Ile Ser Gly Arg Ala His Thr His Ser Tyr Thr Arg Thr
          100          105          110
Gln Thr Arg Ser Glu Lys Ser Pro Pro Pro Pro
          115          120

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&lt;210&gt; 3615

&lt;211&gt; 1388

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3615

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780
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840
gctgtgtccc ctcagaagag aaaatcggat gacaggcgga cccacaggcc cctcagggtc
900

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<210> 3616  
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 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Asp Asp Glu Asp Tyr Glu Arg Arg Arg Ser Glu Cys Val Ser Glu Met  
 50 55 60  
 Leu Asp Leu Glu Lys Gln Phe Ser Glu Leu Lys Glu Lys Leu Phe Arg  
 65 70 75 80  
 Glu Arg Leu Ser Gln Leu Arg Leu Arg Leu Glu Glu Val Gly Ala Glu  
 85 90 95  
 Arg Ala Pro Glu Tyr Thr Glu Pro Leu Gly Gly Leu Gln Arg Ser Leu  
 100 105 110  
 Lys Ile Arg Ile Gln Val Ala Gly Ile Tyr Lys Gly Phe Cys Leu Asp  
 115 120 125  
 Val Ile Arg Asn Lys Tyr Glu Cys Glu Leu Gln Gly Ala Lys Gln His  
 130 135 140  
 Leu Glu Ser Glu Lys Leu Leu Leu Tyr Asp Thr Leu Gln Gly Glu Leu  
 145 150 155 160  
 Gln Glu Arg Ile Gln Arg Leu Glu Glu Asp Arg Gln Ser Leu Asp Leu  
 165 170 175  
 Ser Ser Glu Trp Trp Asp Asp Lys Leu His Ala Arg Gly Ser Ser Arg  
 180 185 190  
 Ser Trp Asp Ser Leu Pro Pro Ser Lys Arg Lys Lys Ala Pro Leu Val  
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 Ser Gly Pro Tyr Ile Val Tyr Met Leu Gln Glu Ile Gly Ile Leu Glu  
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 Asp Trp Thr Ala Ile Lys Lys Ala Arg Ala Ala Val Ser Pro Gln Lys

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Leu Ala Gly His His Lys Tyr Leu His Thr Thr Ile Phe Gly Leu Thr
                35                40                45
Ser Tyr Cys Pro Asp Cys Ala Leu Leu Leu Val Ser Ala Asn Thr Gly
                50                55                60
Ile Ala Gly Thr Thr Arg Glu His Leu Gly Leu Ala Leu Ala Leu Lys
65                70                75                80
Val Pro Phe Phe Ile Val Val Ser Lys Ile Asp Leu Cys Ala Lys Thr
                85                90                95
Thr Val Glu Arg Thr Val Arg Gln Leu Glu Arg Val Leu Lys Gln Pro
                100                105                110
Gly Cys His Lys Val Pro Met Leu Val Thr Ser Glu Asp Asp Ala Val
                115                120                125
Thr Ala Ala Gln Gln Phe Ala Gln Ser Pro Asn Val Thr Pro Ile Phe
                130                135                140
Thr Leu Ser Ser
145

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&lt;210&gt; 3619

&lt;211&gt; 948

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3619

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720
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900

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<210> 3620  
<211> 159  
<212> PRT  
<213> Homo sapiens

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35 40 45  
Pro Gly Ala Ser Ser Gln Pro Cys Ser Thr Tyr Pro Pro Trp Arg Thr  
50 55 60  
Thr Thr Leu Ser Thr Ser Thr Ser Trp Ser Cys Leu Leu Leu Pro Cys  
65 70 75 80  
Ala Ser Cys Pro Ser Arg Cys Ser Cys Gln Thr Trp Pro Ser Ser Pro  
85 90 95  
Thr Ala Ser Thr Pro Thr Thr Ser Cys Thr Ser Phe Met Thr Thr Cys  
100 105 110  
Cys His Ser Ser Thr Pro Cys Gly Ser Phe Pro Ala Trp Pro Thr Arg  
115 120 125  
His Gly Ser Ser Ser Trp Arg Ala Gly Ala Arg Val His Thr Ser Thr  
130 135 140  
Ser Thr Ser Cys Ser Ala Pro Ser Ser Leu Ser Cys Gly His Ser  
145 150 155

<210> 3621  
<211> 2934  
<212> DNA  
<213> Homo sapiens

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120  
ggttaaaagg aaggatttgc acaccttcca cttagggctc gggtaatccc aaacttcctc  
180  
ccttaattgg gcttgcagtg ctaaaaagca gatcgttctc tctgaggttt tcccaacagt  
240  
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300  
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360  
tcagagaaac tgctgagtga ccactgaacg aaaagatcta atcttaaggc ttacgcgtgt  
420  
tccatccacc acatcagaac aatgtcgtat gtttttgtaa atgattcttc tcagactaac  
480  
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540

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2160

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 2934

&lt;210&gt; 3622

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3622

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Leu	Gln	Ala	Cys	Ile	Asp	Gly	Asp	Phe	Asn	Tyr	Ser	Lys	Arg	Leu	Leu
			20					25					30		
Glu	Ser	Gly	Phe	Asp	Pro	Asn	Ile	Arg	Asp	Ser	Arg	Gly	Arg	Thr	Gly
		35					40					45			
Leu	His	Leu	Ala	Ala	Ala	Arg	Gly	Asn	Val	Asp	Ile	Cys	Gln	Leu	Leu
	50					55					60				
His	Lys	Phe	Gly	Ala	Asp	Leu	Leu	Ala	Thr	Asp	Tyr	Gln	Gly	Asn	Thr
65					70					75				80	
Ala	Leu	His	Leu	Cys	Gly	His	Val	Asp	Thr	Ile	Gln	Phe	Leu	Val	Ser
				85				90						95	
Asn	Gly	Leu	Lys	Ile	Asp	Ile	Cys	Asn	His	Gln	Gly	Ala	Thr	Pro	Leu
		100						105					110		
Val	Leu	Ala	Lys	Arg	Arg	Gly	Val	Asn	Lys	Asp	Val	Ile	Arg	Leu	Leu
		115					120					125			
Glu	Ser	Leu	Glu	Glu	Gln	Glu	Val	Lys	Gly	Phe	Asn	Arg	Gly	Thr	His
	130					135					140				
Ser	Lys	Leu	Glu	Thr	Met	Gln	Thr	Ala	Glu	Ser	Glu	Ser	Ala	Met	Glu
145					150					155				160	
Ser	His	Ser	Leu	Leu	Asn	Pro	Asn	Leu	Gln	Gln	Gly	Glu	Gly	Val	Leu



				165					170					175			
Ser	Ser	Phe	Arg	Thr	Thr	Trp	Gln	Glu	Phe	Val	Glu	Asp	Leu	Gly	Phe		
			180					185					190				
Trp	Arg	Val	Leu	Leu	Leu	Ile	Phe	Val	Ile	Ala	Leu	Leu	Ser	Leu	Gly		
		195					200					205					
Ile	Ala	Tyr	Tyr	Val	Ser	Gly	Val	Leu	Pro	Phe	Val	Glu	Asn	Gln	Pro		
	210					215					220						
Glu	Leu	Val	His														
225																	

&lt;210&gt; 3623

&lt;211&gt; 586

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3623

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586

&lt;210&gt; 3624

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3624

Met	Gly	Leu	Leu	Gly	Leu	Tyr	Asn	Leu	Gln	Tyr	Phe	Ala	Glu	Arg	Asp		
1				5					10					15			
Ala	Thr	Ala	Ala	Gln	Gln	Val	Leu	Ser	Asp	Ser	Leu	His	Pro	Lys	Cys		
			20					25					30				
Arg	Asp	Ile	Thr	Lys	Glu	Glu	Ile	Ser	Lys	Phe	Ser	Lys	Ala	Glu	Trp		
		35					40					45					
Glu	Lys	Lys	Arg	Met	Asp	Lys	Ala	Ile	Gly	Tyr	Ser	Phe	Ala	Ile	Val		
	50					55					60						
Gly	Ile	Asn	Ile	Thr	Asp	Leu	Ala	Tyr	Asn	Leu	Leu	Val	Ser	Gly	Ala		
65				70				75						80			
Leu	Lys	Thr	His	Phe	Tyr	Asn	Ile	Ala	Pro	Glu	Ala	Pro	Thr	Leu	Ser		

				85					90					95					
His	Phe	Gln	Gln	Thr	Phe	Cys	Tyr	Leu	Met	His	Glu	Phe	His	Lys	Phe				
			100						105					110					
Trp	Ile	Glu	Glu	Asp	Pro	Met	Asp	Ile	Met	Glu	Phe	Asn	Arg	Val	Arg				
		115					120					125							
Glu	Lys	Phe	Arg	Lys	Arg	Ile	Ile	Lys	Gln	Leu	Gln	Asn	Pro	Asp	Met				
	130					135				140									
Ala	Leu	Cys	Pro	His	Phe	Ala	Ala	Ser	Glu	Gly	Leu	Ile	Asn	Met					
145					150					155									

&lt;210&gt; 3625

&lt;211&gt; 4799

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3625

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1140

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&lt;210&gt; 3627

&lt;211&gt; 1760

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3627

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&lt;210&gt; 3628

&lt;211&gt; 440

&lt;212&gt; PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 3628

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Cys	Lys	Gln	Cys	Gln	Glu	Thr	Glu	Ile	Thr	Thr	Lys	Asn	Glu	Ile	Phe
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His Lys Asp Glu Asp Leu Ser Ser Leu Val Gln Asp Asp Asp Met Leu
65      70      75      80
Tyr Trp His Lys His Gly Asp Gly Trp Lys Thr Pro Val Pro Met Glu
      85      90      95
Glu Asp Pro Leu Leu Asp Thr Asp Met Leu Met Ser Glu Phe Ser Asp
      100      105      110
Thr Leu Phe Ser Thr Leu Ser Ser His Gln Pro Val Ala Trp Pro Asn
      115      120      125
Pro Arg Glu Ile Ala His Leu Gly Asn Ala Asp Met Ile Gln Pro Gly
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Leu Ile Pro Leu Gln Pro Asn Leu Asp Phe Met Asp Thr Phe Glu Pro
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Phe Gln Asp Leu Phe Ser Ser Ser Arg Ser Ile Phe Gly Ser Met Leu
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&lt;210&gt; 3633

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&lt;212&gt; DNA

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&lt;400&gt; 3633

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660

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&lt;210&gt; 3634

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3634

Met	Val	Asn	Glu	Thr	Arg	Pro	Arg	Leu	Gln	Lys	Val	Ala	Ser	Trp	Gln
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Ala	His	Gln	Phe	Glu	Ala	Trp	Ile	Ala	Ala	Phe	Asn	Tyr	Trp	His	Pro
			20					25					30		
Glu	Ile	Val	Tyr	Ser	Gly	Gly	Asp	Asp	Gly	Leu	Leu	Arg	Gly	Trp	Asp
		35					40					45			
Thr	Arg	Val	Pro	Gly	Lys	Phe	Leu	Phe	Thr	Ser	Xaa	Lys	Thr	His	His
	50					55					60				
Xaa	Gly	Val	Cys	Ser	Ile	Gln	Ser	Ser	Pro	His	Arg	Glu	His	Ile	Leu
65					70				75					80	
Ala	Thr	Gly	Ser	Tyr	Asp	Glu	His	Ile	Leu	Leu	Trp	Asp	Thr	Arg	Asn
			85					90				95			
Met	Lys	Gln	Pro	Leu	Ala	Asp	Thr	Pro	Val	Gln	Gly	Gly	Val	Trp	Arg
			100					105					110		
Ile	Lys	Trp	His	Pro	Phe	His	His	His	Leu	Leu	Leu	Ala	Ala	Cys	Met

115 120 125  
 His Ser Gly Phe Lys Ile Leu Asn Cys Gln Lys Ala Met Glu Glu Arg  
 130 135 140  
 Gln Glu Ala Thr Val Leu Thr Ser His Thr Leu Pro Asp Ser Leu Val  
 145 150 155 160  
 Tyr Gly Ala Asp Trp Ser Trp Leu Leu Phe Arg Ser Leu Gln Arg Ala  
 165 170 175  
 Pro Ser Trp Ser Phe Pro Ser Asn Leu Gly Thr Lys Thr Ala Asp Leu  
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 Lys Gly Ala Ser Glu Leu Pro Thr Pro Cys His Glu Cys Arg Glu Asp  
 195 200 205  
 Asn Asp Gly Glu Gly His Ala Arg Pro Gln Ser Gly Met Lys Pro Leu  
 210 215 220  
 Thr Glu Gly Met Arg Lys Asn Gly Thr Trp Leu Gln Ala Thr Ala Ala  
 225 230 235 240  
 Thr Thr Arg Asp Cys Gly Val Asn Pro Glu Glu Ala Asp Ser Ala Phe  
 245 250 255  
 Ser Leu Leu Ala Thr Cys Ser Phe Tyr Asp His Ala Leu His Leu Trp  
 260 265 270  
 Glu Trp Glu Gly Asn  
 275

&lt;210&gt; 3635

&lt;211&gt; 835

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3635

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<210> 3636

<211> 278

<212> PRT

<213> Homo sapiens

<400> 3636

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			20					25					30		
Ala	Arg	Leu	Gln	Gln	Val	Asp	Pro	Val	Leu	Leu	Lys	Asp	Glu	Pro	Gln
			35				40					45			
Gln	Thr	Ala	Ala	Gln	Met	Gly	Cys	Ala	Pro	Ile	Gln	Pro	Leu	Ala	Met
	50					55					60				
Pro	Gln	Ala	Leu	Pro	Leu	Ala	Ala	Gly	Pro	Leu	Pro	Pro	Gly	Ser	Ile
65					70					75				80	
Ala	Asn	Leu	Thr	Glu	Leu	Gln	Gly	Val	Ile	Val	Gly	Gln	Pro	Val	Leu
				85					90					95	
Gly	Gln	Ala	Gln	Leu	Ala	Gly	Leu	Gly	Gln	Gly	Ile	Leu	Thr	Glu	Thr
			100					105					110		
Gln	Gln	Gly	Leu	Met	Val	Ala	Ser	Pro	Ala	Gln	Thr	Leu	Asn	Asp	Thr
		115					120					125			
Leu	Asp	Asp	Ile	Met	Ala	Ala	Val	Ser	Gly	Arg	Ala	Ser	Ala	Met	Ser
	130					135					140				
Asn	Thr	Pro	Thr	His	Ser	Ile	Ala	Ala	Ser	Ile	Ser	Gln	Pro	Gln	Thr
145					150					155				160	
Pro	Thr	Pro	Ser	Pro	Ile	Ile	Ser	Pro	Ser	Ala	Met	Leu	Pro	Ile	Tyr
				165					170					175	
Pro	Ala	Ile	Asp	Ile	Asp	Ala	Gln	Thr	Glu	Ser	Asn	His	Asp	Thr	Ala
			180					185					190		
Leu	Thr	Leu	Ala	Cys	Ala	Gly	Gly	His	Glu	Glu	Leu	Val	Gln	Thr	Leu
	195						200					205			
Leu	Glu	Arg	Gly	Ala	Ser	Ile	Glu	His	Arg	Asp	Lys	Lys	Gly	Phe	Thr
	210					215				220					
Pro	Leu	Ile	Leu	Ala	Ala	Thr	Ala	Gly	His	Val	Gly	Val	Val	Glu	Ile
225				230					235					240	
Leu	Leu	Asp	Asn	Gly	Ala	Asp	Ile	Glu	Ala	Gln	Ser	Glu	Arg	Thr	Lys
				245					250					255	
Asp	Thr	Pro	Leu	Ser	Leu	Ala	Cys	Ser	Gly	Gly	Arg	Gln	Glu	Val	Val
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Glu	Leu	Leu	Leu	Ala	Arg										
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<210> 3637

<211> 2128

<212> DNA

<213> Homo sapiens

<400> 3637

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480  
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1680

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<210> 3638  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 3638  
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 Leu Trp Gly Ser Gln Leu Gly Lys Pro Val Ser Phe Gly Thr Phe Arg  
 35 40 45  
 Arg Cys Ser Tyr Pro Val His Asp Glu Ser Arg Gln Met Met Val Met  
 50 55 60  
 Val Glu Glu Cys Gly Arg Tyr Ala Ser Phe Gln Gly Ile Pro Ser Ala  
 65 70 75 80  
 Glu Trp Arg Ile Cys Thr Ile Val Thr Gly Leu Gly Cys Gly Leu Leu  
 85 90 95  
 Leu Leu Val Ala Leu Thr Ala Leu Met Gly Cys Cys Val Ser Asp Leu  
 100 105 110  
 Ile Ser Arg Thr Val Gly Arg Val Ala Gly Gly Ile Gln Phe Leu Gly  
 115 120 125  
 Gly Leu Leu Ile Gly Ala Gly Cys Ala Leu Tyr Pro Leu Gly Trp Asp  
 130 135 140  
 Ser Glu Glu Val Arg Gln Thr Cys Gly Tyr Thr Ser Gly Gln Phe Asp  
 145 150 155 160  
 Leu Gly Lys Cys Glu Ile Gly Trp Ala Tyr Tyr Cys Thr Gly Ala Gly  
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 Ala Thr Ala Ala Met Leu Leu Cys Thr Trp Leu Ala Cys Phe Ser Gly  
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 Lys Lys Gln Lys His Tyr Pro Tyr  
 195 200

<210> 3639  
 <211> 726  
 <212> DNA  
 <213> Homo sapiens



&lt;400&gt; 3639

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120  
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180  
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240  
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420  
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540  
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720  
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726

&lt;210&gt; 3640

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3640

Met	Leu	His	Ala	Ala	Arg	Lys	Arg	Asp	His	Val	Pro	Phe	Arg	Lys	Met
1				5					10					15	
Ser	Leu	Ile	Met	Lys	Glu	Met	Pro	Trp	Arg	Thr	Gln	His	Pro	Asn	Phe
			20					25					30		
Ser	Leu	Leu	Asn	Pro	Leu	Lys	Gly	Glu	Ile	Phe	Leu	Leu	Pro	Ala	Arg
		35					40					45			
Val	Tyr	Gly	Asp	Asp	Thr	Leu	Arg	Pro	Cys	Trp	Cys	Trp	Lys	Asn	His
	50					55					60				
Leu	Trp	Gln	Cys	His	Phe	Leu	Arg	Lys	Thr	Tyr	Gln	Ser	Phe	Ala	Met
65				70					75					80	
Phe	Thr	Ile	Asp	Lys	Lys	Arg	Asp	Met	Gln	Ser	Val	Lys	Cys	Ile	Thr
			85					90						95	
Leu	Ile	Ile	Cys	Leu	His										
			100												

&lt;210&gt; 3641

&lt;211&gt; 455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3641

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180  
gagctcgaga cgctcgcgcg ctcacctcct gggccccctgt gcgtggggaa gtcaggaaga  
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420  
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455

&lt;210&gt; 3642

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3642

Met	Ala	Gln	Pro	Leu	Val	Leu	Ala	Pro	Ser	Arg	Arg	Pro	Gly	Gln	Leu
1				5					10					15	
Pro	Arg	Gly	Arg	Ala	Gly	Gly	Ala	Ala	Pro	Gly	Gly	Glu	Glu	Met	Ser
			20					25					30		
Gln	Ser	Pro	Glu	Glu	Ser	Arg	Ser	Ser	His	Ala	Ser	Arg	Asp	Leu	Ala
		35					40					45			
Pro	Leu	Glu	Arg	Arg	Ser	Gly	Arg	Gly	Ala	Arg	Asp	Ala	Arg	Ala	Leu
	50					55					60				
Thr	Ser	Trp	Ala	Pro	Val	Arg	Gly	Glu	Val	Arg	Lys	Lys	Thr	Pro	Ser
65					70					75				80	
Glu	Val	Thr	Val	Pro	Thr	Arg	Val	Asp	Ser	Pro	Arg	Pro	Asp	His	Ala
			85					90					95		
Arg	Arg	Trp	Pro	Lys	Gly	Arg	Gly	Trp	Gly	Arg	Gly	Cys	Ser	Ala	Pro
			100					105					110		
Ser	Ser	Arg	Ala	Ala	Ser	Leu	Gln	Val	Phe	Ala	Leu	Ala	Arg	Arg	Ser
		115					120					125			
Pro	Arg	Glu	Gln	Phe	Gly	Thr	Val	Arg	Ile	Gly	Phe	Arg	Glu	Pro	Ala
	130						135					140			
Phe	Lys	Thr	Arg												
145															

&lt;210&gt; 3643

&lt;211&gt; 2243

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3643

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 2040  
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 2100  
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 2220  
 aaaaaaaaaa aaaaaaaaaa aaa  
 2243

<210> 3644

<211> 560

<212> PRT

<213> Homo sapiens

<400> 3644

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			20					25					30		
Asp	Met	Ser	Asp	Arg	Arg	Ala	Ala	Val	Ile	Phe	Ala	Asp	Thr	Leu	Thr
		35				40					45				
Leu	Leu	Phe	Glu	Gly	Ile	Ala	Arg	Ile	Val	Glu	Thr	His	Gln	Pro	Ile
	50					55				60					
Val	Glu	Thr	Tyr	Tyr	Gly	Pro	Gly	Arg	Leu	Tyr	Thr	Leu	Ile	Lys	Tyr
65				70					75					80	
Leu	Gln	Val	Glu	Cys	Asp	Arg	Gln	Val	Glu	Lys	Val	Val	Asp	Lys	Phe
			85					90					95		
Ile	Lys	Gln	Arg	Asp	Tyr	His	Gln	Gln	Phe	Arg	His	Val	Gln	Asn	Asn
		100					105						110		
Leu	Met	Arg	Asn	Ser	Thr	Thr	Glu	Lys	Ile	Glu	Pro	Arg	Glu	Leu	Asp
	115						120					125			
Pro	Ile	Leu	Thr	Glu	Val	Thr	Leu	Met	Asn	Ala	Arg	Ser	Glu	Leu	Tyr
	130					135					140				
Leu	Arg	Phe	Leu	Lys	Lys	Arg	Ile	Ser	Ser	Asp	Phe	Glu	Val	Gly	Asp
145				150					155					160	
Ser	Met	Ala	Ser	Glu	Glu	Val	Lys	Gln	Glu	His	Gln	Lys	Cys	Leu	Asp
			165					170					175		
Lys	Leu	Leu	Asn	Asn	Cys	Leu	Leu	Ser	Cys	Thr	Met	Gln	Glu	Leu	Ile
		180					185					190			
Gly	Leu	Tyr	Val	Thr	Met	Glu	Glu	Tyr	Phe	Met	Arg	Glu	Thr	Val	Asn
	195					200						205			
Lys	Ala	Val	Ala	Leu	Asp	Thr	Tyr	Glu	Lys	Gly	Gln	Leu	Thr	Ser	Ser

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      210      215      220
Met Val Asp Asp Val Phe Tyr Ile Val Lys Lys Cys Ile Gly Arg Ala
225      230      235      240
Leu Ser Ser Ser Ser Ile Asp Cys Leu Cys Ala Met Ile Asn Leu Ala
      245      250      255
Thr Thr Glu Leu Glu Ser Asp Phe Arg Asp Val Leu Cys Asn Lys Leu
      260      265      270
Arg Met Gly Phe Pro Ala Thr Thr Phe Gln Asp Ile Gln Arg Gly Val
      275      280      285
Thr Ser Ala Val Asn Ile Met His Ser Ser Leu Gln Gln Gly Lys Phe
      290      295      300
Asp Thr Lys Gly Ile Glu Ser Thr Asp Glu Ala Lys Met Ser Phe Leu
305      310      315      320
Val Thr Leu Asn Asn Val Glu Val Cys Ser Glu Asn Ile Ser Thr Leu
      325      330      335
Lys Lys Thr Leu Glu Ser Asp Cys Thr Lys Leu Phe Ser Gln Gly Ile
      340      345      350
Gly Gly Glu Gln Ala Gln Ala Lys Phe Asp Ser Cys Leu Ser Asp Leu
      355      360      365
Ala Ala Val Ser Asn Lys Phe Arg Asp Leu Leu Gln Glu Gly Leu Thr
      370      375      380
Glu Leu Asn Ser Thr Ala Ile Lys Pro Gln Val Gln Pro Trp Ile Asn
385      390      395      400
Ser Phe Phe Ser Val Ser His Asn Ile Glu Glu Glu Glu Phe Asn Asp
      405      410      415
Tyr Glu Ala Asn Asp Pro Trp Val Gln Gln Phe Ile Leu Asn Leu Glu
      420      425      430
Gln Gln Met Ala Glu Phe Lys Ala Ser Leu Ser Pro Val Ile Tyr Asp
      435      440      445
Ser Leu Thr Gly Leu Met Thr Ser Leu Val Ala Val Glu Leu Glu Lys
      450      455      460
Val Val Leu Lys Ser Thr Phe Asn Arg Leu Gly Gly Leu Gln Phe Asp
465      470      475      480
Lys Glu Leu Arg Ser Leu Ile Ala Tyr Leu Thr Thr Val Thr Thr Trp
      485      490      495
Thr Ile Arg Asp Lys Phe Ala Arg Leu Ser Gln Met Ala Thr Ile Leu
      500      505      510
Asn Leu Glu Arg Val Thr Glu Ile Leu Asp Tyr Trp Gly Pro Asn Ser
      515      520      525
Gly Pro Leu Thr Trp Arg Leu Thr Pro Ala Glu Val Arg Gln Val Leu
      530      535      540
Ala Leu Arg Ile Asp Phe Arg Ser Glu Asp Ile Lys Arg Leu Arg Leu
545      550      555      560

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&lt;210&gt; 3645

&lt;211&gt; 823

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3645

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60

ccagggtttt gtagatggat tcctcaaaaa ctcttttgag gtattgcctg ggcttctcag  
120

tcgggttgat ttcctcatct tctatttgat gggctaactg ctctatggaa ggaagatctt  
 180  
 cctcctcctt ggaggctaag atttggcgta actctttcct gagatcaata aaacgatcgt  
 240  
 ggaacagggc caggcaccac ggctcggtag agtagctata gagatctgtg atcagggtttt  
 300  
 catcgtaccg agcacacagg ttgttgagga gttgctcgtg ctggccaaac aagcggatgt  
 360  
 agttggaggc ggggaagggc tccctagaaa ggcacgtgat ggtttccacc attttatact  
 420  
 tgtaatatg aattcggaag taagtcccat ttttcgcact gccggttact agttctaaac  
 480  
 cataattagg ctgggccatt tgtacctcca agggagttgg aatggcaggc ttggcaatat  
 540  
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 600  
 ggatgagccg gtcaagatta gctgggtggc cggtcacagg ctcaagggtt ggatcaaaga  
 660  
 gatgtagcat agctgctgcc agctgaaagc caatttcttt ggaactgaag ttgctgggtg  
 720  
 gccattcat ttgagtagta tctattggag aatttggtga gggagccagc agctctgatg  
 780  
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 823

&lt;210&gt; 3646

&lt;211&gt; 243

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3646

Met	Asn	Gly	Pro	Thr	Ser	Asn	Phe	Ser	Ser	Lys	Glu	Ile	Gly	Phe	Gln
1				5					10					15	
Leu	Ala	Ala	Ala	Met	Leu	His	Leu	Phe	Asp	Pro	Thr	Leu	Glu	Pro	Val
			20					25					30		
Thr	Glu	Pro	Pro	Ala	Asn	Leu	Asp	Arg	Leu	Ile	Pro	Met	Tyr	Lys	Gly
			35				40					45			
Ala	Lys	Ile	Gln	Gly	Gly	Ile	Leu	Pro	Gly	Ser	Tyr	His	Tyr	Leu	His
	50					55					60				
Ile	Ala	Lys	Pro	Ala	Ile	Pro	Thr	Pro	Leu	Glu	Val	Gln	Met	Ala	Gln
65					70				75					80	
Pro	Asn	Tyr	Gly	Leu	Glu	Leu	Val	Thr	Gly	Ser	Ala	Lys	Asn	Gly	Thr
				85					90					95	
Tyr	Phe	Arg	Ile	His	Ile	Asn	Lys	Tyr	Lys	Met	Val	Glu	Thr	Ile	Thr
			100				105					110			
Cys	Leu	Ser	Arg	Glu	Pro	Phe	Pro	Ala	Ser	Asn	Tyr	Ile	Arg	Leu	Phe
		115					120				125				
Gly	Gln	His	Glu	Gln	Leu	Leu	Asn	Asn	Leu	Cys	Ala	Arg	Tyr	Asp	Glu
	130					135					140				
Asn	Leu	Ile	Thr	Asp	Leu	Tyr	Ser	Tyr	Phe	Thr	Glu	Pro	Trp	Cys	Leu
145					150				155					160	
Ala	Leu	Phe	His	Asp	Arg	Phe	Ile	Asp	Leu	Arg	Lys	Glu	Leu	Arg	Gln
			165					170						175	
Ile	Leu	Ala	Ser	Lys	Glu	Glu	Glu	Asp	Leu	Pro	Ser	Ile	Glu	Gln	Leu

			180					185				190			
Ala	His	Gln	Ile	Glu	Asp	Glu	Glu	Ile	Asn	Pro	Thr	Glu	Lys	Pro	Arg
		195					200					205			
Gln	Tyr	Leu	Lys	Arg	Val	Phe	Glu	Glu	Ser	Ile	Tyr	Lys	Thr	Leu	Val
	210					215					220				
Glu	Arg	Ser	Thr	Leu	Asp	Tyr	Leu	His	Tyr	Asn	Arg	Tyr	His	Leu	Pro
225					230					235				240	
Met	Tyr	Ala													

<210> 3647  
 <211> 584  
 <212> DNA  
 <213> Homo sapiens

<400> 3647  
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 120  
 acgagggcac ctactcctgc cacctgcacc accattactg tggcctgcac gaacgccgcg  
 180  
 tcttccacct gacggtcgcc gaacccacg cggagccgcc cccccggggc tctccgggca  
 240  
 acggctccag ccacagcggc gccccaggcc caggtgaagg aggcctccct gggacccggg  
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 420  
 gccgctccga cccgcgttc cccgcagacc ccacactggc gcgcggccac aacgtcatca  
 480  
 atgtcatcgt ccccgagagc cgagcccact tcttccagca gctgggctac gtgctggcca  
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<210> 3648  
 <211> 63  
 <212> PRT  
 <213> Homo sapiens

Thr	Arg	Arg	Ala	Ser	Ala	Ala	Pro	Thr	Gly	Pro	Phe	Phe	Cys	Ala	Thr
1				5					10				15		
Ala	Trp	Leu	Trp	Ala	Arg	Met	Pro	Leu	Ser	Ala	Val	Thr	Ser	His	Cys
		20						25					30		
Val	Ser	Ser	Arg	Trp	Arg	Ser	Pro	Thr	Arg	Ala	Pro	Thr	Pro	Ala	Thr
	35					40					45				
Cys	Thr	Thr	Ile	Thr	Val	Ala	Cys	Thr	Asn	Ala	Ala	Ser	Ser	Thr	
50					55						60				

<210> 3649  
 <211> 648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3649

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ggaagcatga tactgaaggc ttgtcactcc tgttttcact tccacacaga caagcatatt  
120  
tgctcattgt ttgctgtgct cccctttttt tttcagggtg ctatttctgc agatgtcaaa  
180  
gaagttctgt taactgatgg gaatgaaaag gccatcagaa atgtgcaaga catcatcaca  
240  
aggaatcaga aggctggtgt gtttaagacc cagaaaatat caagctgcgt tttacgatgg  
300  
gataatgaga cagatgtctc tcaactggaa ggacattttg acattggtat gtgtgctgac  
360  
tgctgtttc tggaccagta cagagccagc cttgttgatg caataaagag attactccag  
420  
cccaggggga aagcgatggt atttgcccc aagcgaggga atactttaaa ccagttttgc  
480  
aatctagctg aaaaagctgg tttctgtatc caaagacatg aaaattatga tgaacacatt  
540  
tcaaacttcc actccaagtt gaaaaaggaa aaccgggaca tatatgaaga aaaccttcat  
600  
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648

&lt;210&gt; 3650

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3650

Met	Ile	Leu	Lys	Ala	Cys	His	Ser	Cys	Phe	His	Phe	His	Thr	Asp	Lys
1				5					10					15	
His	Ile	Cys	Ser	Leu	Phe	Ala	Val	Leu	Pro	Phe	Phe	Phe	Gln	Val	Ala
			20					25					30		
Ile	Ser	Ala	Asp	Val	Lys	Glu	Val	Leu	Leu	Thr	Asp	Gly	Asn	Glu	Lys
		35				40					45				
Ala	Ile	Arg	Asn	Val	Gln	Asp	Ile	Ile	Thr	Arg	Asn	Gln	Lys	Ala	Gly
	50				55					60					
Val	Phe	Lys	Thr	Gln	Lys	Ile	Ser	Ser	Cys	Val	Leu	Arg	Trp	Asp	Asn
65				70					75					80	
Glu	Thr	Asp	Val	Ser	Gln	Leu	Glu	Gly	His	Phe	Asp	Ile	Val	Met	Cys
			85					90					95		
Ala	Asp	Cys	Leu	Phe	Leu	Asp	Gln	Tyr	Arg	Ala	Ser	Leu	Val	Asp	Ala
		100					105					110			
Ile	Lys	Arg	Leu	Leu	Gln	Pro	Arg	Gly	Lys	Ala	Met	Val	Phe	Ala	Pro
	115					120						125			
Arg	Arg	Gly	Asn	Thr	Leu	Asn	Gln	Phe	Cys	Asn	Leu	Ala	Glu	Lys	Ala
	130				135						140				
Gly	Phe	Cys	Ile	Gln	Arg	His	Glu	Asn	Tyr	Asp	Glu	His	Ile	Ser	Asn
145				150					155					160	
Phe	His	Ser	Lys	Leu	Lys	Lys	Glu	Asn	Pro	Asp	Ile	Tyr	Glu	Glu	Asn



165 170 175  
Leu His Tyr Pro Pro Leu Leu Ile Leu Thr Lys His Gly  
180 185

<210> 3651  
<211> 2469  
<212> DNA  
<213> Homo sapiens

<400> 3651  
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120  
tttgaagggg cactgtggt catcctgaac atgcccagg gaacagagtt tgggattgac  
180  
tataactcct gggaggctcg gcccaggctc cggggcgctga agatgatccc tccaggcatc  
240  
cacttctctc actacagctc tgtggacaag gctaatacga aggaagtagg ccctcgtatg  
300  
ggtttcttcc ttagcctgca ccagcggggg ctgacagtgc tgcgctggag cacactcagg  
360  
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420  
caggagctgg accagttcct ggggccttac ccatatgcca ccctgaagaa gtggatctca  
480  
ctcaccaact tcatcagcga agccacagtg gagaagctac agcccagaaa tcgacagatc  
540  
tgtgcctttt ccgatgtgct acctgtgctc tccatgaagc acaccaagga ccgctggggg  
600  
cagaatctac ccgctgtggt cattgagtgc aaaagctacc aagagggcct ggcccggcta  
660  
ccagagatga agcccagagc cgggacagag atccgcttct cagagctgcc cacgcagatg  
720  
ttcccagagg gtgccacgcc agctgagata accaagcaca gcatggacct gagctatgcc  
780  
ctggagactg tgctcatcaa gcagttcccc agcagcccc aggatgtgct tggatgaactc  
840  
cagtttgctt ttgtgtgctt cctgctgggg aatgtgtacg aggcatttga gcattggaag  
900  
cggctcctgc acctcctgtg ccggtcagaa gcagccatga tgaagcacca caccctctac  
960  
atcaacctca tgtccatcct gtaccaccag cttgggtgaga tccccgctga cttcttcgta  
1020  
gacattgtct cccaagacaa ctctctcacc agcaccttac aggttttctt ttcctctgcc  
1080  
tgcagcattg ccgtggatgc caccctgaga aagaaagctg aaaagtcca agctcacctg  
1140  
accaagaagt tccggtggga ctttgctgct gaacctgagg actgtgcccc ggtgggtggg  
1200  
gagctccctg agggcatcga gatgggctaa ctccggggagc gctctcagct gcgaggggcc  
1260  
ccttcccaca gggctgcagt cctggcctct ccatttactt cttcccatcc tgggacctgc  
1320

cagggcagca atctctccag gtcctgcaaa gatggagcca gaattccctt tttcactgat  
 1380  
 aaatatatctt cttcattgcc aaagaggctg tacccatcct gaaggcacat ttgtgggttc  
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 cccatcagcc aggccttggt gctaacctgg ctgaatttca cacaggctct tacacacaca  
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 cgctcctagg agacatctgc ctacacggca accatatttc ctctgaatga gaaggaattg  
 1560  
 aaccaaagt ccaagaaaga actgattggt tgttccatag gagcttagga aacaagaaac  
 1620  
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 aggcccagtg ggtcatctcc caaggtgggt gtggaccctg gcctcagagg ccttgctggt  
 1920  
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 1980  
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 2100  
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 2160  
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 2220  
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 2340  
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 2400  
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 2460  
 aaaaaaaaaa  
 2469

&lt;210&gt; 3652

&lt;211&gt; 384

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3652

Met	Ala	Ala	Val	Gln	Met	Asp	Pro	Glu	Leu	Ala	Lys	Arg	Leu	Phe	Phe
1				5					10					15	
Glu	Gly	Ala	Thr	Val	Val	Ile	Leu	Asn	Met	Pro	Lys	Gly	Thr	Glu	Phe
			20					25					30		
Gly	Ile	Asp	Tyr	Asn	Ser	Trp	Glu	Val	Gly	Pro	Lys	Phe	Arg	Gly	Val
	35						40					45			
Lys	Met	Ile	Pro	Pro	Gly	Ile	His	Phe	Leu	His	Tyr	Ser	Ser	Val	Asp

50		55		60											
Lys	Ala	Asn	Pro	Lys	Glu	Val	Gly	Pro	Arg	Met	Gly	Phe	Phe	Leu	Ser
65		70		75		80									
Leu	His	Gln	Arg	Gly	Leu	Thr	Val	Leu	Arg	Trp	Ser	Thr	Leu	Arg	Glu
		85		90		95									
Glu	Val	Asp	Leu	Ser	Pro	Ala	Pro	Glu	Ser	Glu	Val	Glu	Ala	Met	Arg
		100		105		110									
Ala	Asn	Leu	Gln	Glu	Leu	Asp	Gln	Phe	Leu	Gly	Pro	Tyr	Pro	Tyr	Ala
		115		120		125									
Thr	Leu	Lys	Lys	Trp	Ile	Ser	Leu	Thr	Asn	Phe	Ile	Ser	Glu	Ala	Thr
		130		135		140									
Val	Glu	Lys	Leu	Gln	Pro	Glu	Asn	Arg	Gln	Ile	Cys	Ala	Phe	Ser	Asp
145		150		155		160									
Val	Leu	Pro	Val	Leu	Ser	Met	Lys	His	Thr	Lys	Asp	Arg	Val	Gly	Gln
		165		170		175									
Asn	Leu	Pro	Arg	Cys	Gly	Ile	Glu	Cys	Lys	Ser	Tyr	Gln	Glu	Gly	Leu
		180		185		190									
Ala	Arg	Leu	Pro	Glu	Met	Lys	Pro	Arg	Ala	Gly	Thr	Glu	Ile	Arg	Phe
		195		200		205									
Ser	Glu	Leu	Pro	Thr	Gln	Met	Phe	Pro	Glu	Gly	Ala	Thr	Pro	Ala	Glu
		210		215		220									
Ile	Thr	Lys	His	Ser	Met	Asp	Leu	Ser	Tyr	Ala	Leu	Glu	Thr	Val	Leu
225		230		235		240									
Ile	Lys	Gln	Phe	Pro	Ser	Ser	Pro	Gln	Asp	Val	Leu	Gly	Glu	Leu	Gln
		245		250		255									
Phe	Ala	Phe	Val	Cys	Phe	Leu	Leu	Gly	Asn	Val	Tyr	Glu	Ala	Phe	Glu
		260		265		270									
His	Trp	Lys	Arg	Leu	Leu	His	Leu	Leu	Cys	Arg	Ser	Glu	Ala	Ala	Met
		275		280		285									
Met	Lys	His	His	Thr	Leu	Tyr	Ile	Asn	Leu	Met	Ser	Ile	Leu	Tyr	His
		290		295		300									
Gln	Leu	Gly	Glu	Ile	Pro	Ala	Asp	Phe	Phe	Val	Asp	Ile	Val	Ser	Gln
305		310		315		320									
Asp	Asn	Phe	Leu	Thr	Ser	Thr	Leu	Gln	Val	Phe	Phe	Ser	Ser	Ala	Cys
		325		330		335									
Ser	Ile	Ala	Val	Asp	Ala	Thr	Leu	Arg	Lys	Lys	Ala	Glu	Lys	Phe	Gln
		340		345		350									
Ala	His	Leu	Thr	Lys	Lys	Phe	Arg	Trp	Asp	Phe	Ala	Ala	Glu	Pro	Glu
		355		360		365									
Asp	Cys	Ala	Pro	Val	Val	Val	Glu	Leu	Pro	Glu	Gly	Ile	Glu	Met	Gly
370		375		380											

&lt;210&gt; 3653

&lt;211&gt; 283

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3653

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60

gcattatacc aatcagagct tcttttgctg ctgctgaaat ggaacgggtgc catcaggccg  
120

tcttctccac tggagatgct ccttcagctc agcaggacgc tagctcgga ctcagactgc  
180

acattttttgc ggattgggag gagggccgac gccgtggccg gatagtctct ggagctgcct  
 240  
 tttgggggtg tttgcctgtt ggcattttca gtactccacg cgt  
 283

<210> 3654  
 <211> 88  
 <212> PRT  
 <213> Homo sapiens

<400> 3654  
 Met Pro Gln Ala Ser Pro Gly Ala Trp Arg His Trp Arg Lys Cys Ile  
 1 5 10 15  
 Ile Pro Ile Arg Ala Ser Phe Ala Ala Glu Met Glu Arg Cys His  
 20 25 30  
 Gln Ala Val Phe Ser Thr Gly Asp Ala Pro Ser Ala Gln Gln Asp Ala  
 35 40 45  
 Ser Ser Glu Leu Arg Leu His Ile Phe Ala Asp Trp Glu Glu Gly Arg  
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<210> 3655  
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 <212> DNA  
 <213> Homo sapiens

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 300  
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 3477

&lt;210&gt; 3656

&lt;211&gt; 429

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3656

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Cys	Met	Ala	Ser	Leu	Phe	Pro	Ala	Trp	Glu	Pro	Pro	Leu	Ile	Thr	Leu
			20					25				30			
Lys	Ala	Gly	Thr	Gly	Ser	Met	Arg	Ser	Gly	Phe	Pro	Ala	Lys	Ser	Ala
		35					40				45				
Met	Trp	Arg	Tyr	Arg	Gly	Thr	Pro	Phe	Ser	Lys	Ala	Val	Glu	His	Ile
	50					55					60				
Asn	Lys	Thr	Ile	Ala	Pro	Ala	Leu	Val	Ser	Lys	Lys	Leu	Asn	Val	Thr

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65          70          75          80
Glu Gln Glu Lys Ile Asp Lys Leu Met Ile Glu Met Asp Gly Thr Glu
          85          90          95
Asn Lys Ser Lys Phe Gly Ala Asn Ala Ile Leu Gly Val Ser Leu Ala
          100          105          110
Val Cys Lys Ala Gly Ala Val Glu Lys Gly Val Pro Leu Tyr Arg His
          115          120          125
Ile Ala Asp Leu Ala Gly Asn Ser Glu Val Ile Leu Pro Val Pro Ala
          130          135          140
Phe Asn Val Ile Asn Gly Gly Ser His Ala Gly Asn Lys Leu Ala Met
145          150          155          160
Gln Glu Phe Met Ile Leu Pro Val Gly Ala Ala Asn Phe Arg Glu Ala
          165          170          175
Met Arg Ile Gly Ala Glu Val Tyr His Asn Leu Lys Asn Val Ile Lys
          180          185          190
Glu Lys Tyr Gly Lys Asp Ala Thr Asn Val Gly Asp Glu Gly Gly Phe
          195          200          205
Ala Pro Asn Ile Leu Glu Asn Lys Glu Gly Leu Glu Leu Leu Lys Thr
          210          215          220
Ala Ile Gly Lys Ala Gly Tyr Thr Asp Lys Val Val Ile Gly Met Asp
225          230          235          240
Val Ala Ala Ser Glu Phe Phe Arg Ser Gly Lys Tyr Asp Leu Asp Phe
          245          250          255
Lys Ser Pro Asp Asp Pro Ser Arg Tyr Ile Ser Pro Asp Gln Leu Ala
          260          265          270
Asp Leu Tyr Lys Ser Phe Ile Lys Asp Tyr Pro Val Val Ser Ile Glu
          275          280          285
Asp Pro Phe Asp Gln Asp Asp Trp Gly Ala Trp Gln Lys Phe Thr Ala
          290          295          300
Ser Ala Gly Ile Gln Val Val Gly Asp Asp Leu Thr Val Thr Asn Pro
305          310          315          320
Lys Arg Ile Ala Gln Ala Val Asn Glu Lys Ser Cys Asn Cys Leu Leu
          325          330          335
Leu Lys Val Asn Gln Ile Gly Ser Val Thr Glu Ser Leu Gln Ala Cys
          340          345          350
Lys Leu Ala Gln Ala Asn Gly Trp Gly Val Met Val Ser His Arg Ser
          355          360          365
Gly Glu Thr Glu Asp Thr Phe Ile Ala Asp Leu Val Val Gly Leu Cys
          370          375          380
Thr Gly Gln Ile Lys Thr Gly Ala Pro Cys Arg Ser Glu Arg Leu Ala
385          390          395          400
Lys Tyr Asn Gln Leu Leu Arg Ile Glu Glu Glu Leu Gly Ser Lys Ala
          405          410          415
Lys Phe Ala Gly Arg Asn Phe Arg Asn Pro Leu Ala Lys
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&lt;210&gt; 3657

&lt;211&gt; 337

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3657

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120  
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gttcattttc ggctcaaggc ttacacgtgc aggtgtgcca catgttcatt ttcgggtcaa  
240  
ggcgtacatg tgcaggtgtg ttacatgttc attgtcagct caacgcgtac acgtgcaggt  
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337

<210> 3658  
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<213> Homo sapiens

<400> 3658  
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Leu Arg Val His Phe Arg Leu Lys Ala Tyr Thr Cys Arg Cys Val Thr  
20 25 30  
Cys Ser Phe Ser Ala Gln Gly Val His Val Gln Val Cys Tyr Val Phe  
35 40 45  
Ile Phe Gly Ser Arg Leu Thr Arg Ala Gly Val Pro His Val His Phe  
50 55 60  
Arg Leu Lys Ala Tyr Met Cys Arg Cys Val Thr Cys Ser Leu Ser Ala  
65 70 75 80  
Gln Arg Val His Val Gln Val Cys His Met Phe Ile Phe Gly Ser Arg  
85 90 95  
Arg Thr Arg

<210> 3659  
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<212> DNA  
<213> Homo sapiens

<400> 3659  
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120  
gttgaaaata agacggccca gatattaaat cttcagcaac atttatctgc ccttgaaaaa  
180  
gatattaaac acaatgagga acttcttaaa aggtgccaac tacattataa agaactaaag  
240  
atgaaaataa gaaaaaatat ttctgaaatt cggaacttg agaacataga agaacaccag  
300  
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360  
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420  
gaagcagaaa ataagtatga tgcaattaaa ttcaaaatta atcaactatc ggagctagca  
480



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 720  
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 780  
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 1025

&lt;210&gt; 3660

&lt;211&gt; 341

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3660

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Ser	Ser	Glu	Asn	Thr	Arg	Pro	Lys	Phe	Leu	Ser	Arg	Asp	Val	Asp	Ser
			20					25					30		
Glu	Ile	Ser	Asp	Leu	Glu	Asn	Glu	Val	Glu	Asn	Lys	Thr	Ala	Gln	Ile
		35					40					45			
Leu	Asn	Leu	Gln	Gln	His	Leu	Ser	Ala	Leu	Glu	Lys	Asp	Ile	Lys	His
	50					55					60				
Asn	Glu	Glu	Leu	Leu	Lys	Arg	Cys	Gln	Leu	His	Tyr	Lys	Glu	Leu	Lys
65					70					75				80	
Met	Lys	Ile	Arg	Lys	Asn	Ile	Ser	Glu	Ile	Arg	Glu	Leu	Glu	Asn	Ile
			85					90					95		
Glu	Glu	His	Gln	Ser	Val	Asp	Ile	Ala	Thr	Leu	Glu	Asp	Glu	Ala	Gln
			100					105					110		
Glu	Asn	Lys	Ser	Lys	Met	Lys	Met	Val	Glu	Glu	His	Met	Glu	Gln	Gln
		115				120						125			
Lys	Glu	Asn	Met	Glu	His	Leu	Lys	Ser	Leu	Lys	Ile	Glu	Ala	Glu	Asn
		130				135					140				
Lys	Tyr	Asp	Ala	Ile	Lys	Phe	Lys	Ile	Asn	Gln	Leu	Ser	Glu	Leu	Ala
145					150				155					160	
Asp	Pro	Leu	Lys	Asp	Glu	Leu	Asn	Leu	Ala	Asp	Ser	Glu	Val	Asp	Asn
			165					170					175		
Gln	Lys	Arg	Gly	Lys	Arg	His	Tyr	Glu	Lys	Lys	Gln	Lys	Glu	His	Leu
			180					185					190		
Asp	Thr	Leu	Asn	Lys	Lys	Lys	Arg	Glu	Leu	Asp	Met	Lys	Glu	Lys	Glu
		195					200					205			
Leu	Glu	Glu	Lys	Met	Ser	Gln	Ala	Arg	Gln	Ile	Cys	Pro	Glu	Arg	Ile

210	215	220
Glu Val Glu Lys Ser Ala Ser Ile Leu Asp Lys Glu Ile Asn Arg Leu		
225	230	235
Arg Gln Lys Ile Gln Ala Glu His Ala Ser His Gly Asp Arg Glu Glu		240
	245	250
Ile Met Arg Gln Tyr Gln Glu Ala Arg Glu Thr Tyr Leu Asp Leu Asp		255
	260	265
Ser Lys Val Arg Thr Leu Lys Lys Phe Ile Lys Leu Leu Gly Glu Ile		270
	275	280
Met Glu His Arg Phe Lys Thr Tyr Gln Gln Phe Arg Arg Cys Leu Thr		285
	290	295
Leu Arg Cys Lys Leu Tyr Phe Asp Asn Leu Leu Ser Gln Arg Ala Tyr		300
305	310	315
Cys Gly Lys Met Asn Phe Asp His Lys Asn Glu Thr Leu Ser Ile Ser		320
	325	330
Val Gln Pro Gly Glu		335
	340	

&lt;210&gt; 3661

&lt;211&gt; 1117

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3661

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120

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240

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300

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360

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420

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480

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660

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720

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<210> 3662

<211> 371

<212> PRT

<213> Homo sapiens

<400> 3662

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			20					25					30		
Pro	Ser	Val	Tyr	Pro	Tyr	Lys	Leu	Tyr	Arg	Leu	Leu	Pro	Met	Lys	Cys
		35					40					45			
Lys	Arg	Ala	Pro	Tyr	Lys	Ser	Tyr	Arg	Asn	Ser	Ser	Tyr	Glu	Asn	Ala
	50					55					60				
Arg	Glu	Asn	Ser	Gln	Met	Asn	Glu	Ser	Ala	Pro	Gly	Thr	Tyr	Val	Val
65					70					75					80
Gln	Asn	Pro	His	Ser	Ser	Glu	Leu	Pro	Thr	Leu	Asn	Phe	Gln	Asp	Thr
			85						90					95	
Val	Asn	Thr	Leu	Thr	Asn	Ser	Pro	Ala	Ile	Pro	Leu	Glu	Thr	Ser	Ala
			100					105					110		
Cys	Gln	Asp	Ile	Pro	Thr	Ser	Ala	Asn	Val	Gln	Asn	Ala	Glu	Gly	Thr
		115					120					125			
Lys	Trp	Gly	Glu	Glu	Ala	Leu	Lys	Met	Asp	Leu	Asp	Asn	Asn	Phe	Tyr
	130					135					140				
Ser	Thr	Glu	Val	Ser	Val	Ser	Ser	Thr	Glu	Asn	Ala	Val	Ser	Ser	Asp
145					150					155					160
Leu	Arg	Ala	Gly	Asp	Val	Pro	Val	Leu	Ser	Leu	Ser	Asn	Ser	Ser	Glu
			165					170					175		
Asn	Ala	Ala	Ser	Val	Ile	Ser	Tyr	Ser	Gly	Ser	Ala	Pro	Ser	Val	Ile
			180					185					190		
Val	His	Ser	Ser	Gln	Phe	Ser	Ser	Val	Ile	Met	His	Ser	Asn	Ala	Ile
	195						200					205			
Ala	Ala	Met	Thr	Ser	Ser	Asn	His	Arg	Ala	Phe	Ser	Asp	Pro	Ala	Val
	210					215					220				
Ser	Gln	Ser	Leu	Lys	Asp	Asp	Ser	Lys	Pro	Glu	Pro	Asp	Lys	Val	Gly
225				230						235					240
Arg	Phe	Ala	Ser	Arg	Pro	Lys	Ser	Ile	Lys	Glu	Lys	Lys	Lys	Thr	Thr
			245						250					255	
Ser	His	Thr	Arg	Gly	Glu	Ile	Pro	Glu	Glu	Ser	Asn	Tyr	Val	Ala	Asp
		260						265					270		
Pro	Gly	Gly	Ser	Leu	Ser	Lys	Thr	Thr	Asn	Ile	Ala	Glu	Glu	Thr	Ser
	275						280					285			
Lys	Ile	Glu	Thr	Tyr	Ile	Ala	Lys	Pro	Ala	Leu	Pro	Gly	Thr	Ser	Thr
	290					295					300				
Asn	Ser	Asn	Val	Ala	Pro	Leu	Cys	Gln	Ile	Thr	Val	Lys	Ile	Gly	Asn

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305          310          315          320
Glu Ala Ile Val Lys Arg His Ile Leu Gly Ser Lys Leu Phe Tyr Lys
          325          330          335
Arg Gly Arg Arg Pro Lys Tyr Gln Met Gln Glu Glu Leu Leu Pro Gln
          340          345          350
Gly Asn Asp Pro Glu Pro Ser Gly Asp Ser Pro Leu Gly Leu Cys Gln
          355          360          365
Ser Glu Cys
          370

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<210> 3663  
 <211> 481  
 <212> DNA  
 <213> Homo sapiens

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240
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360
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480
g
481

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<210> 3664  
 <211> 138  
 <212> PRT  
 <213> Homo sapiens

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Arg Asp Met Gln Leu Ile Ala Leu Glu Gln Leu Cys Met Leu Leu Leu
          20          25          30
Met Ser Asp Asn Val Asp Arg Cys Phe Glu Thr Cys Pro Pro Arg Thr
          35          40          45
Phe Leu Pro Ala Leu Tyr Lys Ile Phe Leu Asp Glu Ser Ala Pro Asp
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Ile Val Asp Ala Asp Arg Ile Ala Val Gly Leu Glu Glu Gly Leu Tyr		1260
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Val Ile Glu Val Thr Arg Asp Val Ile Val Arg Ala Ala Asp Cys Lys		1280
	1285	1290
Lys Val His Gln Ile Glu Leu Ala Pro Arg Glu Lys Ile Val Ile Leu		1295
	1300	1305
Leu Cys Gly Arg Asn His His Val His Leu Tyr Pro Trp Ser Ser Leu		1310
	1315	1320
Asp Gly Ala Glu Gly Ser Phe Asp Ile Lys Leu Pro Glu Thr Lys Gly		1325
	1330	1335
Cys Gln Leu Met Ala Thr Ala Thr Leu Lys Arg Asn Ser Gly Thr Cys		1340
1345	1350	1355
Leu Phe Val Ala Val Lys Arg Leu Ile Leu Cys Tyr Glu Ile Gln Arg		1360
	1365	1370
Thr Lys Pro Phe His Arg Lys Phe Asn Glu Ile Val Ala Pro Gly Ser		1375
	1380	1385
Val Gln Cys Leu Ala Val Leu Arg Asp Arg Leu Cys Val Gly Tyr Pro		1390
	1395	1400
Ser Gly Phe Cys Leu Leu Ser Ile Gln Gly Asp Gly Gln Pro Leu Asn		1405
	1410	1415
Leu Val Asn Pro Asn Asp Pro Ser Leu Ala Phe Leu Ser Gln Gln Ser		1420
1425	1430	1435
Phe Asp Ala Leu Cys Ala Val Glu Leu Glu Ser Glu Glu Tyr Leu Leu		1440
	1445	1450
Cys Phe Ser His Met Gly Leu Tyr Val Asp Pro Gln Gly Arg Arg Ala		1455
	1460	1465
Arg Ala Gln Glu Leu Met Trp Pro Ala Ala Pro Val Ala Cys Ser Cys		1470
	1475	1480
Ser Pro Thr His Val Thr Val Tyr Ser Glu Tyr Gly Val Asp Val Phe		1485
	1490	1495
Asp Val Arg Thr Met Glu Trp Val Gln Thr Ile Gly Leu Arg Arg Ile		1500
1505	1510	1515
Arg Pro Leu Asn Ser Glu Gly Thr Leu Asn Leu Leu Asn Cys Glu Pro		1520

1525 1530 1535  
 Pro Arg Leu Ile Tyr Phe Lys Ser Lys Phe Ser Gly Ala Val Leu Asn  
 1540 1545 1550  
 Val Pro Asp Thr Ser Asp Asn Ser Lys Lys Gln Met Leu Arg Thr Arg  
 1555 1560 1565  
 Ser Lys Arg Arg Phe Val Phe Lys Val Pro Glu Glu Glu Arg Leu Gln  
 1570 1575 1580  
 Gln Arg Arg Glu Met Leu Arg Asp Pro Glu Leu Arg Ser Lys Met Ile  
 1585 1590 1595 1600  
 Ser Asn Pro Thr Asn Phe Asn His Val Ala His Met Gly Pro Gly Asp  
 1605 1610 1615  
 Gly Met Gln Val Leu Met Asp Leu Pro Leu Ser Ala Val Pro Pro Ser  
 1620 1625 1630  
 Gln Glu Glu Arg Pro Gly Pro Ala Pro Thr Asn Leu Ala Arg Gln Pro  
 1635 1640 1645  
 Pro Ser Arg Asn Lys Pro Tyr Ile Ser Trp Pro Ser Ser Gly Gly Ser  
 1650 1655 1660  
 Glu Pro Ser Val Thr Val Pro Leu Arg Ser Met Ser Asp Pro Asp Gln  
 1665 1670 1675 1680  
 Asp Phe Asp Lys Glu Pro Asp Ser Asp Ser Thr Lys His Ser Thr Pro  
 1685 1690 1695  
 Ser Asn Ser Ser Asn Pro Ser Gly Pro Pro Ser Pro Asn Ser Pro His  
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 Arg Ser Gln Leu Pro Leu Glu Gly Leu Glu Gln Pro Ala Cys Asp Thr  
 1715 1720 1725

<210> 3667  
 <211> 505  
 <212> DNA  
 <213> Homo sapiens

<400> 3667  
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 120  
 tgattgtatt tactctttct tccctactca tagtatgcgt tccattttga ggaatcacag  
 180  
 atatcgaaga gatgccagaa cactagaaga tgaagaagag atgtgggttta acacagatga  
 240  
 agatgacatg gaagatggag aagctgtagt gtctccatct gacaaaacta aaaatgatga  
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 tgatattatg gatccaataa gttaaattcat ggaaaggaag aaattaaaag aaagtgagga  
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 aaaggaagtg cttctgaaaa caaacctttc tggacggcag agcccaagtt tcaagctttc  
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 ttctccggga tcacctggat cccca  
 505

<210> 3668  
 <211> 117  
 <212> PRT

<213> Homo sapiens

<400> 3668

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Met Arg Ser Ile Leu Arg Asn His Arg Tyr Arg Arg Asp Ala Arg Thr
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Leu Glu Asp Glu Glu Glu Met Trp Phe Asn Thr Asp Glu Asp Asp Met
           20           25           30
Glu Asp Gly Glu Ala Val Val Ser Pro Ser Asp Lys Thr Lys Asn Asp
           35           40           45
Asp Asp Ile Met Asp Pro Ile Ser Lys Phe Met Glu Arg Lys Lys Leu
           50           55           60
Lys Glu Ser Glu Glu Lys Glu Val Leu Leu Lys Thr Asn Leu Ser Gly
65           70           75           80
Arg Gln Ser Pro Ser Phe Lys Leu Ser Leu Ser Ser Gly Thr Lys Thr
           85           90           95
Asn Leu Thr Ser Gln Ser Ser Thr Thr Asn Leu Pro Gly Ser Pro Gly
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Ser Pro Gly Ser Pro
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<210> 3669

<211> 1226

<212> DNA

<213> Homo sapiens

<400> 3669

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120
ggattaatct ttacatttaa tcattcactt tatgaaaacc tggatgaaga attaaatgaa
180
gaattagcag caaaagtggc tcagatgttt tatgtggctg agccaaagca agtgcccat
240
attctctgta gtccttctat gaagaatatt aatcctttaa ctgccatgag ctatctaagg
300
aagatggata cttctgggtt ttcattccatc ttagtgacac tgagcaaggc agcagtggca
360
ctgaaaatgg gagatcttga cgtgtacaga aatgaaatga aaagccatcc agagatgaag
420
ttggtgtgtg gcttcatttt ggaaccacgc ctgttgattc aacacaggaa gggacagatt
480
gttccaactg agcttgcgac tcacttgaag gagactcagc caggattgct tgtggcttca
540
gtcctgggat tgcagaagaa cagcaaaatt gggattgaag aagcagattc tttctttaag
600
gtgctttgtg gtaaggatga agataccatc cctcagctct tgatagactt ttgggaagct
660
cagctagtgg catgtctccc agatgtggta cttcaggaac tctttttcaa actcacatca
720
cagtacatct ggagattgtc taagaggcag cctcctgaca ccacaccatt gcgaacatcg
780
gaggatctga taaatgcctg tagtcattat ggcttaattt atccatgggt tcacgtcgta
840

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atatcatctg attcttttagc tgataaaaat tatacagaag atcttttcaaa attacagttct  
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 cttatatgtg gtccttcatt tgacatagct tccattattc cgttcttgga gccactttca  
 960  
 gaagacacta ttgccggcct cagtgtccat gttctgtgtc gtacacgctt gaaagagtat  
 1020  
 gaacagtgc tagacatact gttagagaga tgcccggagg cagtcattcc atatgcta  
 1080  
 catgaactga aagaagagaa ccggactctg tgggtggaaaa aactgttgcc tgaactttgt  
 1140  
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 1200  
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 1226

<210> 3670  
 <211> 385  
 <212> PRT  
 <213> Homo sapiens

<400> 3670  
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 Asn His Ser Leu Tyr Glu Asn Leu Asp Glu Glu Leu Asn Glu Glu Leu  
 35 40 45  
 Ala Ala Lys Val Val Gln Met Phe Tyr Val Ala Glu Pro Lys Gln Val  
 50 55 60  
 Pro His Ile Leu Cys Ser Pro Ser Met Lys Asn Ile Asn Pro Leu Thr  
 65 70 75 80  
 Ala Met Ser Tyr Leu Arg Lys Met Asp Thr Ser Gly Phe Ser Ser Ile  
 85 90 95  
 Leu Val Thr Leu Ser Lys Ala Ala Val Ala Leu Lys Met Gly Asp Leu  
 100 105 110  
 Asp Val Tyr Arg Asn Glu Met Lys Ser His Pro Glu Met Lys Leu Val  
 115 120 125  
 Cys Gly Phe Ile Leu Glu Pro Arg Leu Leu Ile Gln His Arg Lys Gly  
 130 135 140  
 Gln Ile Val Pro Thr Glu Leu Ala Thr His Leu Lys Glu Thr Gln Pro  
 145 150 155 160  
 Gly Leu Leu Val Ala Ser Val Leu Gly Leu Gln Lys Asn Ser Lys Ile  
 165 170 175  
 Gly Ile Glu Glu Ala Asp Ser Phe Phe Lys Val Leu Cys Gly Lys Asp  
 180 185 190  
 Glu Asp Thr Ile Pro Gln Leu Leu Ile Asp Phe Trp Glu Ala Gln Leu  
 195 200 205  
 Val Ala Cys Leu Pro Asp Val Val Leu Gln Glu Leu Phe Phe Lys Leu  
 210 215 220  
 Thr Ser Gln Tyr Ile Trp Arg Leu Ser Lys Arg Gln Pro Pro Asp Thr  
 225 230 235 240  
 Thr Pro Leu Arg Thr Ser Glu Asp Leu Ile Asn Ala Cys Ser His Tyr  
 245 250 255  
 Gly Leu Ile Tyr Pro Trp Val His Val Val Ile Ser Ser Asp Ser Leu



<210> 3672



<211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 3672  
 Met Ser Glu Cys Pro Leu Ile Leu Tyr Ile His Lys His Ile Asp Thr  
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 Tyr Ser Gln Ser Tyr Leu Phe Asn Asp Leu Phe Tyr Pro Val Tyr Ser  
 20 25 30  
 Gly Gly Arg Met Val Thr Tyr Glu His Leu Arg Glu Val Val Phe Gly  
 35 40 45  
 Lys Ser Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly  
 50 55 60  
 Met Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu  
 65 70 75 80  
 Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly Lys  
 85 90 95  
 Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile Leu Ala  
 100 105 110  
 Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val  
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<210> 3673  
 <211> 1052  
 <212> DNA  
 <213> Homo sapiens

<400> 3673  
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 180  
 aaaacacatg gtggatcttc aggaagcaga ggatattatt ctagtgcttt cgcaagttcc  
 240  
 acaaatgcat atatgctgat ctatagactg aaggatccag ccagaaatgc aaaatttcta  
 300  
 gaagtggatg aatacccaga acatattaaa aacttgggtgc agaaagagag agagttggaa  
 360  
 gaacaagaaa agagacaacg agaaattgag cgcaatacat gcaagataaa attattctgt  
 420  
 ttgcataccta caaaacaagt aatgatggaa aataaattgg aggttcataa ggataagaca  
 480  
 ttaaaggaag cagtagaaat ggcttataag atgatggatt tagaagaggt aataccctg  
 540  
 gattgctgtc gccttggttaa atatgatgag tttcatgatt atctagaacg gtcatatgaa  
 600  
 ggagaagaag atacaccaat ggggcttcta ctaggtggcg tcaagtcaac atatatgttt  
 660  
 gatctgctgt tggagacgag aaagcctgat cagggtttcc aatcttataa acctggaggg  
 720  
 gagccatttt acaccatttt tagttgggtct gtacttagaa ttttcctgag aaagggtttt  
 780

tttttattgt agcaatgaac ataatttaca ttttgtatat ggtcttaca tgtagaataa  
 840  
 ttttgacagg ttgagaagta ctcagcacca gcttggaatt aagttctaga ttacttgcaa  
 900  
 agagttgtgt acataatttt aaaaacaaca aaaaacaaca aagcttctag cttacgggtct  
 960  
 tcagtggggtt ttttcttctc cagtgggcgg tactgaatca ttctggatgc tgtcaatccc  
 1020  
 taaagttatc aattgctctc ttaggaagat ct  
 1052

<210> 3674  
 <211> 263  
 <212> PRT  
 <213> Homo sapiens

<400> 3674  
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 20 25 30  
 Ala Cys Ile Lys Ser Phe Ser Asp Glu Gln Trp Tyr Ser Phe Asn Asp  
 35 40 45  
 Gln His Val Ser Arg Ile Thr Gln Glu Asp Ile Lys Lys Thr His Gly  
 50 55 60  
 Gly Ser Ser Gly Ser Arg Gly Tyr Tyr Ser Ser Ala Phe Ala Ser Ser  
 65 70 75 80  
 Thr Asn Ala Tyr Met Leu Ile Tyr Arg Leu Lys Asp Pro Ala Arg Asn  
 85 90 95  
 Ala Lys Phe Leu Glu Val Asp Glu Tyr Pro Glu His Ile Lys Asn Leu  
 100 105 110  
 Val Gln Lys Glu Arg Glu Leu Glu Glu Gln Glu Lys Arg Gln Arg Glu  
 115 120 125  
 Ile Glu Arg Asn Thr Cys Lys Ile Lys Leu Phe Cys Leu His Pro Thr  
 130 135 140  
 Lys Gln Val Met Met Glu Asn Lys Leu Glu Val His Lys Asp Lys Thr  
 145 150 155 160  
 Leu Lys Glu Ala Val Glu Met Ala Tyr Lys Met Met Asp Leu Glu Glu  
 165 170 175  
 Val Ile Pro Leu Asp Cys Cys Arg Leu Val Lys Tyr Asp Glu Phe His  
 180 185 190  
 Asp Tyr Leu Glu Arg Ser Tyr Glu Gly Glu Glu Asp Thr Pro Met Gly  
 195 200 205  
 Leu Leu Leu Gly Gly Val Lys Ser Thr Tyr Met Phe Asp Leu Leu Leu  
 210 215 220  
 Glu Thr Arg Lys Pro Asp Gln Val Phe Gln Ser Tyr Lys Pro Gly Gly  
 225 230 235 240  
 Glu Pro Phe Tyr Thr Ile Phe Ser Trp Ser Val Leu Arg Ile Phe Leu  
 245 250 255  
 Arg Lys Val Phe Phe Leu Leu  
 260

<210> 3675  
 <211> 837

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3675

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nntccggaga tgtgaagaag gggggcgagc ggacaggaag atgaagggag caaagctgcc
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cgccgcggga caggcgtcta ggtgaacaag aaaatgaccg aagaaacaca cccagacgat
120
gacagctata ttgtgcgtgt caaggctgtg gttatgacca gagatgactc cagcggggga
180
tggttcccac aggaaggagg cgggatcagt cgcgtcgggg tctgtaaggt catgcacccc
240
gaaggcaatg gacgaagcgg ctttctcatc catggtgaac gacagaaaga caaactgggt
300
gtattggaat gctatgtaag aaaggacttg gtctacacca aagccaatcc aacgtttcat
360
cactggaagg tcgataatag gaagtttgga cttactttcc aaagccctgc tgatgcccg
420
gcctttgaca ggggagtaag gaaagcaatc gaagacctta tagaagaagt agaaaatgat
480
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540
gtgtacagct gccactgaaa aggaaaggga tctgtgacct ctggagccct ggttcgggtt
600
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660
agggcccttg ggcagtcagt tctcatggtg ggcttgacta gagtccacag atgcaaacac
720
aaaaattctc cactgcagca catccaggta tcaaatacaga gggttaaaga agccatagac
780
agggccctgt gaagaaagaa atatcaagca aggcattgta ataccaaatt cagatct
837

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&lt;210&gt; 3676

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3676

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Met Thr Glu Glu Thr His Pro Asp Asp Asp Ser Tyr Ile Val Arg Val
1          5          10          15
Lys Ala Val Val Met Thr Arg Asp Asp Ser Ser Gly Gly Trp Phe Pro
20          25          30
Gln Glu Gly Gly Gly Ile Ser Arg Val Gly Val Cys Lys Val Met His
35          40          45
Pro Glu Gly Asn Gly Arg Ser Gly Phe Leu Ile His Gly Glu Arg Gln
50          55          60
Lys Asp Lys Leu Val Val Leu Glu Cys Tyr Val Arg Lys Asp Leu Val
65          70          75          80
Tyr Thr Lys Ala Asn Pro Thr Phe His His Trp Lys Val Asp Asn Arg
85          90          95
Lys Phe Gly Leu Thr Phe Gln Ser Pro Ala Asp Ala Arg Ala Phe Asp
100         105         110
Arg Gly Val Arg Lys Ala Ile Glu Asp Leu Ile Glu Glu Val Glu Asn

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	115		120		125										
Asp	Ser	Gly	Gly	Pro	Arg	Arg	Leu	Leu	Ala	Tyr	Pro	Leu	Ser	Ser	Cys
	130		135		140										
Asn	Gln	Arg	Pro	Arg	Val	Tyr	Ser	Cys	His						
145					150										

<210> 3677  
 <211> 418  
 <212> DNA  
 <213> Homo sapiens

<400> 3677  
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 120  
 tgccgaaaga gcatggagga agatgaaagg cagacaggtc gagaacatgc agtggcgatc  
 180  
 tccttgtcac acacatcctg caaatcacag tcttgtggag atgactctca ttcgtcctcg  
 240  
 tcttcctcct catcatcctc atcctcgtcc tcctcttctt gccctgggaa ctcgggagac  
 300  
 tgggattcta gctcgttctt gtcggcacat aagctctcgg gcctctggaa ttccccacat  
 360  
 tccagtgggg ccatgccagg cagctctctt gggagtcctc ctaccatccc tggcgcgc  
 418

<210> 3678  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 3678  
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 Met Pro Leu Trp Val Cys Gln Ser Cys Arg Lys Ser Met Glu Glu Asp  
 35 40 45  
 Glu Arg Gln Thr Gly Arg Glu His Ala Val Ala Ile Ser Leu Ser His  
 50 55 60  
 Thr Ser Cys Lys Ser Gln Ser Cys Gly Asp Asp Ser His Ser Ser Ser  
 65 70 75 80  
 Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Cys Pro Gly  
 85 90 95  
 Asn Ser Gly Asp Trp Asp Pro Ser Ser Phe Leu Ser Ala His Lys Leu  
 100 105 110  
 Ser Gly Leu Trp Asn Ser Pro His Ser Ser Gly Ala Met Pro Gly Ser  
 115 120 125  
 Ser Leu Gly Ser Pro Pro Thr Ile Pro Gly Ala  
 130 135

<210> 3679  
 <211> 567

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3679

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 120  
 gagatcgag agatcaaggc ccagctggag acagccctga agtggaggaa ctatgagggtg  
 180  
 aagctgcggc tgctgctgca cctggaggaa ctgcagatgg agcatgatat ccggcactat  
 240  
 gacctggagt cggtgcccat gacctgggac cctgtggacc agaaccacag gctgctcacg  
 300  
 ctggagggtc ctggagtgac tgagagccgc ccctcagtgc tacggggcga ccacctgttt  
 360  
 gcccttttgt cctcggagac acaccaggag gaccccatca catataaggg ctttgtgcac  
 420  
 aaggtggaat tggaccgtgt caagctgagc ttttccatga gcctcctgag ccgctttgtg  
 480  
 gatgggctga ccttcaaggt gaactttacc ttcaaccgcc agccgctgcg agtccagcac  
 540  
 cgtgcctggg agttgacagg gcgctgg  
 567

&lt;210&gt; 3680

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3680

Arg	Val	Lys	Gly	Tyr	Asp	Leu	Glu	Leu	Ser	Met	Ala	Leu	Gly	Thr	Tyr	1	5	10	15
Tyr	Pro	Pro	Pro	Arg	Leu	Arg	Gln	Leu	Leu	Pro	Met	Leu	Leu	Gln	Gly	20	25	30	
Thr	Ser	Ile	Phe	Thr	Ala	Pro	Lys	Glu	Ile	Ala	Glu	Ile	Lys	Ala	Gln	35	40	45	
Leu	Glu	Thr	Ala	Leu	Lys	Trp	Arg	Asn	Tyr	Glu	Val	Lys	Leu	Arg	Leu	50	55	60	
Leu	Leu	His	Leu	Glu	Glu	Leu	Gln	Met	Glu	His	Asp	Ile	Arg	His	Tyr	65	70	75	80
Asp	Leu	Glu	Ser	Val	Pro	Met	Thr	Trp	Asp	Pro	Val	Asp	Gln	Asn	Pro	85	90	95	
Arg	Leu	Leu	Thr	Leu	Glu	Val	Pro	Gly	Val	Thr	Glu	Ser	Arg	Pro	Ser	100	105	110	
Val	Leu	Arg	Gly	Asp	His	Leu	Phe	Ala	Leu	Leu	Ser	Ser	Glu	Thr	His	115	120	125	
Gln	Glu	Asp	Pro	Ile	Thr	Tyr	Lys	Gly	Phe	Val	His	Lys	Val	Glu	Leu	130	135	140	
Asp	Arg	Val	Lys	Leu	Ser	Phe	Ser	Met	Ser	Leu	Leu	Ser	Arg	Phe	Val	145	150	155	160
Asp	Gly	Leu	Thr	Phe	Lys	Val	Asn	Phe	Thr	Phe	Asn	Arg	Gln	Pro	Leu	165	170	175	
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180

185

<210> 3681  
 <211> 788  
 <212> DNA  
 <213> Homo sapiens

<400> 3681  
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 120  
 gagaccggga ggcagagctt cagcagctgc gggacagcct ggggctgagc atggagcagc  
 180  
 gcggcggagg tcgcctgcga ggccgctggc caggcctgag cctctgccac catggccatt  
 240  
 gtgcagactc tgccagtgcc actggagcct gctcctgaag ctgccactgc cccacaagct  
 300  
 ccagtcattg gtagtgtgag cagccttacc tcaggccggc cctgtcccgg ggggccagct  
 360  
 cctccccgcc accacggccc tcttgggccc accttcttcc gccagcagga tggcctgcta  
 420  
 cggggtggct atgaggcaca ggagccgctg tgcccagctg tgcccctag gaaggctgtc  
 480  
 cctgtcacca gcttcaccta catcaatgag gacttccgga cagagtcacc ccccagccca  
 540  
 agcagtgatg ttgaggatgc ccgagagcag cgggcacaca atgcccacct ccgcggccca  
 600  
 ccaccaaagc tcatccctgt ctctggaaag ctggagaaga acatagagaa gatcctgatc  
 660  
 cgcccaacag ccttcaagcc agtgctgccc aaacctcgag gggctccgtc cctgcctagc  
 720  
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 780  
 gggggccc  
 788

<210> 3682  
 <211> 185  
 <212> PRT  
 <213> Homo sapiens

<400> 3682  
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 35 40 45  
 Gly Pro Pro Gly Pro Thr Phe Phe Arg Gln Gln Asp Gly Leu Leu Arg  
 50 55 60  
 Gly Gly Tyr Glu Ala Gln Glu Pro Leu Cys Pro Ala Val Pro Pro Arg  
 65 70 75 80  
 Lys Ala Val Pro Val Thr Ser Phe Thr Tyr Ile Asn Glu Asp Phe Arg

				85					90					95					
Thr	Glu	Ser	Pro	Pro	Ser	Pro	Ser	Ser	Asp	Val	Glu	Asp	Ala	Arg	Glu				
			100					105					110						
Gln	Arg	Ala	His	Asn	Ala	His	Leu	Arg	Gly	Pro	Pro	Pro	Lys	Leu	Ile				
		115					120					125							
Pro	Val	Ser	Gly	Lys	Leu	Glu	Lys	Asn	Ile	Glu	Lys	Ile	Leu	Ile	Arg				
		130				135					140								
Pro	Thr	Ala	Phe	Lys	Pro	Val	Leu	Pro	Lys	Pro	Arg	Gly	Ala	Pro	Ser				
145					150					155					160				
Leu	Pro	Ser	Phe	Met	Gly	Pro	Arg	Ala	Thr	Gly	Leu	Ser	Gly	Ser	Gln				
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&lt;210&gt; 3683

&lt;211&gt; 4421

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3683

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<212> PRT

<213> Homo sapiens

<400> 3684

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&lt;210&gt; 3685

&lt;211&gt; 1293

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3685

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&lt;210&gt; 3690

&lt;211&gt; 504

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3690

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 <213> Homo sapiens

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<210> 3692  
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<212> PRT  
<213> Homo sapiens

<400> 3692  
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Arg Ile Ala Arg Ile Arg Cys Gln Leu Lys Ala Val Cys Gln Pro Arg  
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<210> 3694

<211> 390

<212> PRT

<213> Homo sapiens

<400> 3694

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Ser	Ala	His	Gly	Ser	Ala	Leu	Leu	Thr	Ala	Thr	Phe	Ala	His	Ala	Asp

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&lt;210&gt; 3695

&lt;211&gt; 1615

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3695

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 Cys Asn Ser Trp Ser Ser Pro Gln Leu Gln Ser Ser Leu Pro Glu Pro  
 50 55 60  
 His Asp Arg Pro Leu Ala Leu Pro Leu Ser Asp Ser Gln Ile Gln Trp  
 65 70 75 80  
 Phe Tyr Gln Ala Leu Asn Leu Ser Leu Pro Leu Pro Asn Phe His Ala  
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 Gly Thr Glu Pro Asp Gly Leu Asp Pro Met Val Thr Leu Ser Leu Asn  
 100 105 110  
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 50 55 60  
 Tyr Ala Gly Lys Thr Cys Asn Gln Asp Leu Asn Glu Cys Gly Leu Lys  
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 Pro Arg Pro Cys Lys His Arg Cys Met Asn Thr Tyr Gly Ser Tyr Lys  
 85 90 95  
 Cys Tyr Cys Leu Asn Gly Tyr Met Leu Met Pro Asp Gly Ser Cys Ser  
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 Ser Ala Leu Thr Cys Ser Met Ala Asn Cys Gln Tyr Gly Cys Asp Val  
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&lt;210&gt; 3702

&lt;211&gt; 236

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3702

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Cys	Gly	Lys	Cys	Phe	Gly	Gly	Ser	Gly	Asp	Leu	Arg	Arg	His	Val	Arg
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Glu	Thr	Ser	Asp	Leu	Glu	Lys	Ser	Gln	Ser	Ser	Asp	Ser	Phe	Ser	Gln
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Tyr	Cys	Lys	Leu	Arg	Ser	Met	Ile	Gln	Pro	His	Gly	Val	Ser	Asp	Gln				
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His	Thr	Gln	Pro	His	Ala	Tyr	Ser	Tyr	Ser	Asp	Phe								
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&lt;210&gt; 3703

&lt;211&gt; 3294

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3703

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&lt;210&gt; 3704

&lt;211&gt; 619

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3704

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&lt;211&gt; 1737

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3705

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660  
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720  
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<210> 3712
<211> 368
<212> PRT
<213> Homo sapiens
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2860

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<210> 3713
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<212> DNA
<213> Homo sapiens
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180
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240
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300
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360
caacactccg gatcagacac tggaagtgtg gaacgtcatt cagagaatga aactagtgat
420
cgagaagatg gcccccccaa aggacatcat gtgacagact ctgagaacga tgagccctta
480
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540
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600
catgggagcg actctgagag tgaagagacc aggaaattac ctggtagtga ctctgaaaat
660
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720
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780
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900

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 1020  
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 1080  
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 1140  
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 1260  
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 1719

&lt;210&gt; 3714

&lt;211&gt; 488

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3714

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Thr	Pro	Val	Gln	Asp	Glu	Arg	Asp	Ser	Gly	Ser	Asp	Gly	Glu	Asp	Asp
			20					25					30		
Val	Asn	Glu	Gln	His	Ser	Gly	Ser	Asp	Thr	Gly	Ser	Val	Glu	Arg	His
		35					40					45			
Ser	Glu	Asn	Glu	Thr	Ser	Asp	Arg	Glu	Asp	Gly	Pro	Pro	Lys	Gly	His
	50					55					60				
His	Val	Thr	Asp	Ser	Glu	Asn	Asp	Glu	Pro	Leu	Asn	Leu	Asn	Ala	Ser
65					70					75					80
Asp	Ser	Glu	Ser	Glu	Glu	Leu	His	Arg	Gln	Lys	Asp	Ser	Asp	Ser	Glu
			85						90				95		
Ser	Glu	Glu	Arg	Ala	Glu	Pro	Pro	Ala	Ser	Asp	Ser	Glu	Asn	Glu	Asp
			100					105					110		
Val	Asn	Gln	His	Gly	Ser	Asp	Ser	Glu	Ser	Glu	Glu	Thr	Arg	Lys	Leu
	115						120					125			
Pro	Gly	Ser	Asp	Ser	Glu	Asn	Glu	Glu	Leu	Leu	Asn	Gly	His	Ala	Ser
	130					135					140				
Asp	Ser	Glu	Asn	Glu	Asp	Val	Gly	Lys	His	Pro	Ala	Ser	Asp	Ser	Glu

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145          150          155          160
Ile Glu Glu Leu Gln Lys Ser Pro Ala Ser Asp Ser Glu Thr Glu Asp
          165          170          175
Ala Leu Lys Pro Gln Ile Ser Asp Ser Glu Ser Glu Glu Pro Pro Arg
          180          185          190
His Gln Ala Ser Asp Ser Glu Asn Glu Glu Pro Pro Lys Pro Arg Met
          195          200          205
Ser Asp Ser Glu Ser Glu Glu Leu Pro Lys Pro Gln Val Ser Asp Ser
          210          215          220
Glu Ser Glu Glu Pro Pro Arg His Gln Ala Ser Asp Ser Glu Asn Glu
225          230          235          240
Glu Leu Pro Lys Pro Arg Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro
          245          250          255
Arg His Gln Ala Ser Asp Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg
          260          265          270
Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro Arg Asn Gln Ala Ser Asp
          275          280          285
Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg Val Ser Asp Ser Glu Ser
          290          295          300
Glu Gly Pro Gln Lys Gly Pro Ala Ser Asp Ser Glu Thr Glu Asp Ala
305          310          315          320
Ser Arg His Lys Gln Lys Pro Glu Ser Asp Asp Asp Ser Asp Arg Glu
          325          330          335
Asn Lys Gly Glu Asp Thr Glu Met Gln Asn Asp Ser Phe His Ser Asp
          340          345          350
Ser His Met Asp Arg Lys Lys Phe His Ser Ser Asp Ser Glu Glu Glu
          355          360          365
Glu His Lys Lys Gln Lys Met Asp Ser Asp Glu Asp Glu Lys Glu Gly
          370          375          380
Glu Glu Glu Lys Val Ala Lys Arg Lys Ala Ala Val Leu Ser Asp Ser
385          390          395          400
Glu Asp Glu Glu Lys Ala Ser Ala Lys Lys Ser Arg Val Val Ser Asp
          405          410          415
Ala Asp Asp Ser Asp Ser Asp Ala Val Ser Asp Lys Ser Gly Lys Arg
          420          425          430
Glu Lys Thr Ile Ala Ser Asp Ser Glu Glu Glu Ala Gly Lys Glu Leu
          435          440          445
Ser Asp Lys Lys Asn Glu Glu Lys Asp Leu Phe Gly Ser Asp Ser Glu
          450          455          460
Ser Gly Asn Glu Glu Glu Asn Leu Ile Ala Asp Ile Phe Gly Glu Ser
465          470          475          480
Gly Asp Glu Glu Glu Glu Glu Phe
          485

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<210> 3715
<211> 288
<212> DNA
<213> Homo sapiens

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accacatccc tggaggctcg aattattgcc ttgtctggca agatccgcag ttatgaagaa
120

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cacttgagaa aacatcgaaa ggacaaagcc cacaaacgct atctgcta at gagcattgac  
 180  
 cagaggaaaa agatgctcaa aaacctccgt aacaccaact atgatgtctt tgagaagata  
 240  
 tgctgggggc tgggaattga gtacaccttc cccctctgt attaccgn  
 288

<210> 3716  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 3716  
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 Arg Val Lys Asp Thr Thr Ser Leu Glu Ala Arg Ile Ile Ala Leu Ser  
 20 25 30  
 Gly Lys Ile Arg Ser Tyr Glu Glu His Leu Glu Lys His Arg Lys Asp  
 35 40 45  
 Lys Ala His Lys Arg Tyr Leu Leu Met Ser Ile Asp Gln Arg Lys Lys  
 50 55 60  
 Met Leu Lys Asn Leu Arg Asn Thr Asn Tyr Asp Val Phe Glu Lys Ile  
 65 70 75 80  
 Cys Trp Gly Leu Gly Ile Glu Tyr Thr Phe Pro Pro Leu Tyr Tyr Arg  
 85 90 95

<210> 3717  
 <211> 1545  
 <212> DNA  
 <213> Homo sapiens

<400> 3717  
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 120  
 taacatgggc cctcacaaca tcccaggag acaaaaacat agcagattta ataattctaat  
 180  
 ttagcaagat aaaagtgtgg atttttgtga aaggtagaca ttttctttaa caagtaaaag  
 240  
 tttcagatca ttattgatat ttacttatct taaagtaaag gcattacaca ctcaacattt  
 300  
 ggctgatct gattttttaa cttcatccct aggattgata ttgctgatga tattattaat  
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 420  
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 480  
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 540  
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 600  
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 660

gaagcagcgt gtgtcagtat tccacattta gatctgaaga atgtttctga tggtgataaa  
 720  
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 780  
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 840  
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 900  
 aagttggatt cctcatctaa agcactgtct ttactagaa ttcgaagatc atcctttagt  
 960  
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 1080  
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 1140  
 caaattaaag atgcaaaaca caaaaattct gatggagaat ttgtacctca gacacgtcca  
 1200  
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 1440  
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 1545

&lt;210&gt; 3718

&lt;211&gt; 374

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3718

Met	Gln	Gln	Asp	Cys	Val	Phe	Glu	Asn	Glu	Glu	Asn	Thr	Gln	Ser	Val
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Gly	Ile	Leu	Leu	Glu	Pro	Cys	Ser	Asp	Arg	Gly	Asp	Ser	Glu	Asp	Gly
			20					25					30		
Cys	Leu	Glu	Arg	Glu	Glu	Tyr	Leu	Leu	Phe	Asp	Ser	Asp	Lys	Leu	Ser
			35				40					45			
His	Leu	Ile	Leu	Asp	Ser	Ser	Ser	Lys	Ile	Cys	Asp	Leu	Asn	Ala	Asn
			50			55				60					
Thr	Glu	Ser	Glu	Val	Pro	Gly	Gly	Gln	Ser	Val	Gly	Val	Gln	Gly	Glu
65					70					75				80	
Ala	Ala	Cys	Val	Ser	Ile	Pro	His	Leu	Asp	Leu	Lys	Asn	Val	Ser	Asp
			85					90						95	
Gly	Asp	Lys	Trp	Glu	Glu	Pro	Phe	Pro	Ala	Phe	Lys	Ser	Trp	Gln	Glu
			100					105					110		
Asp	Ser	Glu	Ser	Gly	Glu	Ala	Gln	Leu	Ser	Pro	Gln	Ala	Gly	Arg	Met
			115				120					125			
Asn	His	His	Pro	Leu	Glu	Glu	Asp	Cys	Pro	Pro	Val	Leu	Ser	His	Arg

```

      130              135              140
Ser Leu Asp Phe Gly Gln Ser Gln Arg Phe Leu His Asp Pro Glu Lys
145              150              155              160
Leu Asp Ser Ser Ser Lys Ala Leu Ser Phe Thr Arg Ile Arg Arg Ser
      165              170              175
Ser Phe Ser Ser Lys Asp Glu Lys Arg Glu Asp Arg Thr Pro Tyr Gln
      180              185              190
Leu Val Lys Lys Leu Gln Lys Lys Ile Arg Gln Phe Glu Glu Gln Phe
      195              200              205
Glu Arg Glu Arg Asn Ser Lys Pro Ser Tyr Ser Asp Ile Ala Ala Asn
      210              215              220
Pro Lys Val Leu Lys Trp Met Thr Glu Leu Thr Lys Leu Arg Lys Gln
225              230              235              240
Ile Lys Asp Ala Lys His Lys Asn Ser Asp Gly Glu Phe Val Pro Gln
      245              250              255
Thr Arg Pro Arg Ser Asn Thr Leu Pro Lys Ser Phe Gly Ser Ser Leu
      260              265              270
Asp His Glu Asp Glu Glu Asn Glu Asp Glu Pro Lys Val Ile Gln Lys
      275              280              285
Glu Lys Lys Pro Ser Lys Glu Ala Thr Leu Glu Leu Ile Leu Lys Arg
      290              295              300
Leu Lys Glu Lys Arg Ile Glu Arg Cys Leu Pro Glu Asp Ile Lys Lys
305              310              315              320
Met Thr Lys Asp His Leu Val Glu Glu Lys Ala Ser Leu Gln Lys Ser
      325              330              335
Leu Leu Tyr Tyr Glu Ser Gln His Gly Arg Pro Val Thr Lys Glu Glu
      340              345              350
Arg His Ile Val Lys Pro Leu Tyr Asp Arg Tyr Arg Leu Val Lys Gln
      355              360              365
Met Leu Thr Arg Ala Ser
      370

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&lt;210&gt; 3719

&lt;211&gt; 422

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3719

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180
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240
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300
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420
nn
422

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<210> 3720  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

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 Asn Gln Lys Lys Phe Glu Cys Asn Ser Arg Gln Pro Gly Cys Lys Asn  
 35 40 45  
 Val Cys Phe Asp Asp Phe Phe Pro Ile Ser Gln Val Arg Leu Trp Ala  
 50 55 60  
 Leu Gln Leu Ile Met Val Ser Thr Pro Ser Leu Leu Val Val Leu His  
 65 70 75 80  
 Val Ala Tyr His Glu Gly Arg Glu Lys Arg His Arg Lys Lys Leu Tyr  
 85 90 95  
 Val Ser Pro Gly Thr Met Asp Gly Gly Leu Trp Tyr Ala Tyr Leu Ile  
 100 105 110  
 Ser Leu Ile Val Lys Thr Gly Phe Glu Thr  
 115 120

<210> 3721  
 <211> 4728  
 <212> DNA  
 <213> Homo sapiens

<400> 3721  
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 720

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3540  
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3600  
cagggcata gcatgaagga cagcgatgag gaagacgaag aagacgatta gaccatttgg  
3660  
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3720  
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3780  
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3840  
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3900  
aatacatagt ctaaccacta ggcgtgtccc tggtatcagc aaagatcaat gatgcttcat  
3960

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 4260  
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 4320  
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 4620  
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 4728

&lt;210&gt; 3722

&lt;211&gt; 1216

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3722

Ser	Glu	Lys	Glu	Lys	Glu	Glu	Leu	Glu	Arg	Leu	Gln	Lys	Glu	Glu	Glu
1				5					10					15	
Glu	Arg	Lys	Lys	Arg	Leu	Gln	Leu	Tyr	Val	Phe	Val	Met	Arg	Cys	Ile
			20					25					30		
Ala	Tyr	Pro	Phe	Asn	Ala	Lys	Gln	Pro	Thr	Asp	Met	Ala	Arg	Arg	Gln
		35					40					45			
Gln	Lys	Ile	Ser	Lys	Gln	Gln	Leu	Gln	Thr	Val	Lys	Asp	Arg	Phe	Gln
	50					55					60				
Ala	Phe	Leu	Asn	Gly	Glu	Thr	Gln	Ile	Met	Ala	Asp	Glu	Ala	Phe	Met
65					70				75					80	
Asn	Ala	Val	Gln	Ser	Tyr	Tyr	Glu	Val	Phe	Leu	Lys	Ser	Asp	Arg	Val
			85						90					95	
Ala	Arg	Met	Val	Gln	Ser	Gly	Gly	Cys	Ser	Ala	Asn	Asp	Ser	Arg	Glu
			100					105					110		
Val	Phe	Lys	Lys	His	Ile	Glu	Lys	Arg	Val	Arg	Ser	Leu	Pro	Glu	Ile
	115						120					125			
Asp	Gly	Leu	Ser	Lys	Glu	Thr	Val	Leu	Ser	Ser	Trp	Met	Ala	Lys	Phe
	130					135					140				
Asp	Ala	Ile	Tyr	Arg	Gly	Glu	Glu	Asp	Pro	Arg	Lys	Gln	Gln	Ala	Arg
145					150					155				160	
Met	Thr	Ala	Ser	Ala	Ala	Ser	Glu	Leu	Ile	Leu	Ser	Lys	Glu	Gln	Leu

165 170 175  
Tyr Glu Met Phe Gln Asn Ile Leu Gly Ile Lys Lys Phe Glu His Gln  
180 185 190  
Leu Leu Tyr Asn Ala Cys Gln Leu Asp Asn Pro Asp Glu Gln Ala Ala  
195 200 205  
Gln Ile Arg Arg Glu Leu Asp Gly Arg Leu Gln Met Ala Asp Gln Ile  
210 215 220  
Ala Arg Glu Arg Lys Phe Pro Lys Phe Val Ser Lys Glu Met Glu Asn  
225 230 235 240  
Met Tyr Ile Glu Glu Leu Lys Ser Ser Val Asn Leu Leu Met Ala Asn  
245 250 255  
Leu Glu Ser Met Pro Val Ser Lys Gly Gly Glu Phe Lys Leu Gln Lys  
260 265 270  
Leu Lys Arg Ser His Asn Ala Ser Ile Ile Asp Met Gly Glu Glu Ser  
275 280 285  
Glu Asn Gln Leu Ser Lys Ser Asp Val Val Leu Ser Phe Ser Leu Glu  
290 295 300  
Val Val Ile Met Glu Val Gln Gly Leu Lys Ser Leu Ala Pro Asn Arg  
305 310 315 320  
Ile Val Tyr Cys Thr Met Glu Val Glu Gly Gly Glu Lys Leu Gln Thr  
325 330 335  
Asp Gln Ala Glu Ala Ser Lys Pro Thr Trp Gly Thr Gln Gly Asp Phe  
340 345 350  
Ser Thr Thr His Ala Leu Pro Ala Val Lys Val Lys Leu Phe Thr Glu  
355 360 365  
Ser Thr Gly Val Leu Ala Leu Glu Asp Lys Glu Leu Gly Arg Val Ile  
370 375 380  
Leu His Pro Thr Pro Asn Ser Pro Lys Gln Ser Glu Trp His Lys Met  
385 390 395 400  
Thr Val Ser Lys Asn Cys Pro Asn Gln Asp Leu Lys Ile Lys Leu Ala  
405 410 415  
Val Arg Met Asp Lys Pro Gln Asn Met Lys His Ser Gly Tyr Leu Trp  
420 425 430  
Ala Ile Gly Lys Asn Val Trp Lys Arg Trp Lys Lys Arg Phe Phe Val  
435 440 445  
Leu Val Gln Val Ser Gln Tyr Thr Phe Ala Met Cys Ser Tyr Arg Glu  
450 455 460  
Lys Lys Ala Glu Pro Gln Glu Leu Leu Gln Leu Asp Gly Tyr Thr Val  
465 470 475 480  
Asp Tyr Thr Asp Pro Gln Pro Gly Leu Glu Gly Gly Arg Ala Phe Phe  
485 490 495  
Asn Ala Val Lys Glu Gly Asp Thr Val Ile Phe Ala Ser Asp Asp Glu  
500 505 510  
Gln Asp Arg Ile Leu Trp Val Gln Ala Met Tyr Arg Ala Thr Gly Gln  
515 520 525  
Ser His Lys Pro Val Pro Pro Thr Gln Val Gln Lys Leu Asn Ala Lys  
530 535 540  
Gly Gly Asn Val Pro Gln Leu Asp Ala Pro Ile Ser Gln Phe Ser Gly  
545 550 555 560  
Leu Lys Asp Ala Asp Arg Ala Gln Lys His Gly Met Asp Glu Phe Ile  
565 570 575  
Ser Ser Asn Pro Cys Asn Phe Asp His Ala Ser Leu Phe Glu Met Val  
580 585 590  
Gln Arg Leu Thr Leu Asp His Arg Leu Asn Asp Ser Tyr Ser Cys Leu

2872

1025	1030	1035	1040
Ile Thr Leu Leu Val Ala Lys Phe Val Thr Ile Leu Glu Gly Val Leu			
	1045	1050	1055
Ala Lys Leu Ser Arg Tyr Asp Glu Gly Thr Leu Phe Ser Ser Phe Leu			
	1060	1065	1070
Ser Phe Thr Val Lys Ala Ala Ser Lys Tyr Val Asp Val Pro Lys Pro			
	1075	1080	1085
Gly Met Asp Val Ala Asp Ala Tyr Val Thr Phe Val Arg His Ser Gln			
	1090	1095	1100
Asp Val Leu Arg Asp Lys Val Asn Glu Glu Met Tyr Ile Glu Arg Leu			
1105	1110	1115	1120
Phe Asp Gln Trp Tyr Asn Ser Ser Met Asn Val Ile Cys Thr Trp Leu			
	1125	1130	1135
Thr Asp Arg Met Asp Leu Gln Leu His Ile Tyr Gln Leu Lys Thr Leu			
	1140	1145	1150
Ile Arg Met Val Lys Lys Thr Tyr Arg Asp Phe Arg Leu Gln Gly Val			
	1155	1160	1165
Leu Asp Ser Thr Leu Asn Ser Lys Thr Tyr Glu Thr Ile Arg Asn Arg			
	1170	1175	1180
Leu Thr Val Glu Glu Ala Thr Ala Ser Val Ser Glu Gly Gly Gly Leu			
1185	1190	1195	1200
Gln Gly Ile Ser Met Lys Asp Ser Asp Glu Glu Asp Glu Glu Asp Asp			
	1205	1210	1215

&lt;210&gt; 3723

&lt;211&gt; 830

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3723

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120  
aaccccaacg agaagctgaa ggtgaacttt gggaccccag agttcctgtc acctgaggtg  
180  
gtgaattatg accaaatctc cgataagaca gacatgtgga gtatgggggt gatcacctac  
240  
atgctgctga gcggcctctc ccccttctctg ggagatgatg acacagagac cctaaacaac  
300  
gttctatctg gcaactggta ctttgatgaa gagacctttg aggccgtatc agacgaggcc  
360  
aaagactttg tctccaacct catcgtcaag gaccagaggg cccggatgaa cgctgcccag  
420  
tgtctcgccc atccctggct caacaacctg gcggagaaag ccaaacgctg taaccgacgc  
480  
cttaagtccc agatcttgct taagaaatac ctcatgaaga ggcgctggaa gaaaaacttc  
540  
attgctgtca gcgctgccaa ccgcttcaag aagatcagca gctcgggggc actgatggct  
600  
ctgggggtct gagccctggg cgcagctgaa gcctggacgc agccacacag tggccggggc  
660  
tgaagccaca cagcccagaa ggccagaaaa ggcagccaga tccccagggc agcctcgtta  
720



ggacaaggct gtgccaggct gggaggctcg gggctcccca cgcccccatg cagtgaccgc  
780  
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830

<210> 3724  
<211> 203  
<212> PRT  
<213> Homo sapiens

<400> 3724  
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20 25 30  
Asp Phe Gly Leu Ala Arg Arg Tyr Asn Pro Asn Glu Lys Leu Lys Val  
35 40 45  
Asn Phe Gly Thr Pro Glu Phe Leu Ser Pro Glu Val Val Asn Tyr Asp  
50 55 60  
Gln Ile Ser Asp Lys Thr Asp Met Trp Ser Met Gly Val Ile Thr Tyr  
65 70 75 80  
Met Leu Leu Ser Gly Leu Ser Pro Phe Leu Gly Asp Asp Asp Thr Glu  
85 90 95  
Thr Leu Asn Asn Val Leu Ser Gly Asn Trp Tyr Phe Asp Glu Glu Thr  
100 105 110  
Phe Glu Ala Val Ser Asp Glu Ala Lys Asp Phe Val Ser Asn Leu Ile  
115 120 125  
Val Lys Asp Gln Arg Ala Arg Met Asn Ala Ala Gln Cys Leu Ala His  
130 135 140  
Pro Trp Leu Asn Asn Leu Ala Glu Lys Ala Lys Arg Cys Asn Arg Arg  
145 150 155 160  
Leu Lys Ser Gln Ile Leu Leu Lys Lys Tyr Leu Met Lys Arg Arg Trp  
165 170 175  
Lys Lys Asn Phe Ile Ala Val Ser Ala Ala Asn Arg Phe Lys Lys Ile  
180 185 190  
Ser Ser Ser Gly Ala Leu Met Ala Leu Gly Val  
195 200

<210> 3725  
<211> 1244  
<212> DNA  
<213> Homo sapiens

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120  
gaccatcttc acttttgttt tcaggccttt aaaattgtgc cctacaacac agagaccctt  
180  
gataaactgc taaccgaatc cctgaagaac aatatccctg caagcggact gcacctcttt  
240  
ggaatcaacc agctggaaga agaagatatg atgacaaatc agagggatga agagctgccc  
300



accctgttgc attttgctgc gaagtatgga ctgaagaacc tcaactgcctt gttgctcacc  
 360  
 tgcccaggag ccctgcaggc gtacagcgtg gccaacaagc atggccacta cccaacacc  
 420  
 atcgctgaga aacacggctt cagggacctg cggcagttca tgcacgagta tgtggaaacg  
 480  
 gtggacatgc tcaagagtca cattaaagag gaactgatgc acggggagga ggctgatgct  
 540  
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 ctctatgttg aaatgcttca ggccagtaca tctaaccxaa tccctggaga tggtttctct  
 720  
 cgggccacta aggactctat gatccgcaag tttttagaag gcaacagcat gggaatgacc  
 780  
 aatctggaga gagatcagtg ccatcttggt caggaagaag atgtttatca cacggtggat  
 840  
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 900  
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 960  
 aagtatggca gggaatgatg tccaactggt tctttggagc ttctcaacag ggatttctctg  
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 1140  
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 1200  
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 1244

&lt;210&gt; 3726

&lt;211&gt; 325

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3726

Xaa	Ile	His	Val	Ser	Gly	Lys	Asp	Ile	Thr	Arg	Lys	Pro	Glu	Ile	Ser
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Gly	His	Val	Ile	Ser	Ala	His	Gly	Leu	Ser	Val	Leu	Asn	Leu	Arg	Asp
			20					25					30		
Gly	Arg	Glu	Leu	Asp	Phe	Arg	Ser	Asp	His	Leu	His	Phe	Cys	Phe	Gln
		35					40					45			
Ala	Phe	Lys	Ile	Val	Pro	Tyr	Asn	Thr	Glu	Thr	Leu	Asp	Lys	Leu	Leu
	50					55					60				
Thr	Glu	Ser	Leu	Lys	Asn	Asn	Ile	Pro	Ala	Ser	Gly	Leu	His	Leu	Phe
65					70					75				80	
Gly	Ile	Asn	Gln	Leu	Glu	Glu	Glu	Asp	Met	Met	Thr	Asn	Gln	Arg	Asp
			85					90					95		
Glu	Glu	Leu	Pro	Thr	Leu	Leu	His	Phe	Ala	Ala	Lys	Tyr	Gly	Leu	Lys
		100						105					110		
Asn	Leu	Thr	Ala	Leu	Leu	Leu	Thr	Cys	Pro	Gly	Ala	Leu	Gln	Ala	Tyr

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      115      120      125
Ser Val Ala Asn Lys His Gly His Tyr Pro Asn Thr Ile Ala Glu Lys
      130      135      140
His Gly Phe Arg Asp Leu Arg Gln Phe Ile Asp Glu Tyr Val Glu Thr
      145      150      155      160
Val Asp Met Leu Lys Ser His Ile Lys Glu Glu Leu Met His Gly Glu
      165      170      175
Glu Ala Asp Ala Val Tyr Glu Ser Met Ala His Leu Ser Thr Asp Leu
      180      185      190
Leu Met Lys Cys Ser Leu Asn Pro Gly Cys Asp Glu Asp Leu Tyr Glu
      195      200      205
Ser Met Ala Ala Phe Val Pro Ala Ala Thr Glu Asp Leu Tyr Val Glu
      210      215      220
Met Leu Gln Ala Ser Thr Ser Asn Pro Ile Pro Gly Asp Gly Phe Ser
      225      230      235      240
Arg Ala Thr Lys Asp Ser Met Ile Arg Lys Phe Leu Glu Gly Asn Ser
      245      250      255
Met Gly Met Thr Asn Leu Glu Arg Asp Gln Cys His Leu Gly Gln Glu
      260      265      270
Glu Asp Val Tyr His Thr Val Asp Asp Asp Glu Ala Phe Ser Val Asp
      275      280      285
Leu Ala Ser Arg Pro Pro Val Pro Val Pro Arg Pro Glu Thr Thr Ala
      290      295      300
Pro Gly Ala His Gln Leu Pro Asp Asn Glu Pro Tyr Ile Phe Lys Gly
      305      310      315      320
Lys Tyr Gly Arg Glu
      325

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&lt;210&gt; 3727

&lt;211&gt; 630

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3727

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60
actcgcccca cccactggt gactgccggg ccccttggtga cccactcc agcagggacc
120
ctcgaccccc ctgagaaaca agaaacaggc tgcctcctt tgggtctgga gtcctgcca
180
gtttcagata gccggcttga ggcattccagc agccagtcct ttggtcttgg accacaccga
240
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300
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360
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420
aaggtccagt tcagcaatga cagtcggacc tgggtgggaa gtaggaacca cagcagtggt
480
atggacgcag tatttctctgc caattcagac ccagaaactc cagtgtgaa cctcctgccg
540
gagccccagg tggcccgctt cattcgctg ctgccccaga cctggctcca gggaggcgcg
600

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ccttgccctcc gggcagagat cctggcctgc  
630

<210> 3728  
<211> 210  
<212> PRT  
<213> Homo sapiens

<400> 3728  
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Lys Leu Thr Leu Thr Arg Pro Thr Pro Leu Val Thr Ala Gly Pro Leu  
20 25 30  
Val Thr Pro Thr Pro Ala Gly Thr Leu Asp Pro Ala Glu Lys Gln Glu  
35 40 45  
Thr Gly Cys Pro Pro Leu Gly Leu Glu Ser Leu Arg Val Ser Asp Ser  
50 55 60  
Arg Leu Glu Ala Ser Ser Ser Gln Ser Phe Gly Leu Gly Pro His Arg  
65 70 75 80  
Gly Arg Leu Asn Ile Gln Ser Gly Leu Glu Asp Gly Asp Leu Tyr Asp  
85 90 95  
Gly Ala Trp Cys Ala Glu Glu Gln Asp Ala Asp Pro Trp Phe Gln Val  
100 105 110  
Asp Ala Gly His Pro Thr Arg Phe Ser Gly Val Ile Thr Gln Gly Arg  
115 120 125  
Asn Ser Val Trp Arg Tyr Asp Trp Val Thr Ser Tyr Lys Val Gln Phe  
130 135 140  
Ser Asn Asp Ser Arg Thr Trp Trp Gly Ser Arg Asn His Ser Ser Gly  
145 150 155 160  
Met Asp Ala Val Phe Pro Ala Asn Ser Asp Pro Glu Thr Pro Val Leu  
165 170 175  
Asn Leu Leu Pro Glu Pro Gln Val Ala Arg Phe Ile Arg Leu Leu Pro  
180 185 190  
Gln Thr Trp Leu Gln Gly Gly Ala Pro Cys Leu Arg Ala Glu Ile Leu  
195 200 205  
Ala Cys  
210

<210> 3729  
<211> 1552  
<212> DNA  
<213> Homo sapiens

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120  
atcaagttat cagcagatgt caaaccattt gtccccagat ttgccgggct caatgtggca  
180  
tggttagagt cctcagaagc atgtgtcttc ccagctctg cagccacata ctatccgttt  
240  
gttcaggaac caccagtgc agagcagaaa atatatactg aagacatggc ctttggagct  
300

tcaacttttc cacctcagta tttatcttct gagataactc ttcattccata tgcctattct  
 360  
 ccttataccc ttgactccac acagaatggt tactcagtgct ctggctccca gtatctttat  
 420  
 aaccaaccca gttgttaccg aggttttcaa acagtgaagc atcgaaatga gaacacatgc  
 480  
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 540  
 tatgatcagc aaaagtttga cagtgaagg gctgatggaa ctatatcatc tgagataaaa  
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 tcagctagag gttcacatca tttgtccatt tacgctgaga atagtttgaa atcagatggt  
 660  
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 720  
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 780  
 tcagagatac agaagcaacc caagtgggga cctgtccact ctgtctctac cgacatttct  
 840  
 cttctaagag aagtagtaaa accagctgca gtgttatcaa agggtgaaat agtggtgaaa  
 900  
 aataacccaa atgaatctgt aactgcta atgccgtacca attctccttc atgtacaaga  
 960  
 gagttatctt ggacaccaat gggttatggt gttcgacaga cattatctac agaactgtca  
 1020  
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 1080  
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 1140  
 gaaaaacaca ttattcatcc taccacaaaag tctaaagcat cacaaggtag tgaccttgaa  
 1200  
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 1260  
 gtcctgacag ttcaagagcc tccaaggatt gaagatgccg aggaatttcc caacctggca  
 1320  
 gttgcatctg aaagaagaga cagaatagag acaccgaaat ttcaatctaa gcagcagcca  
 1380  
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 1440  
 ggcattgctga cagccctgga gaagaagcag cactctcagc atgcaaagca gtcctccaaa  
 1500  
 ccagtggtag tctcagttgg agcagtgcca gtcctttcca aagaatgtgc ac  
 1552

&lt;210&gt; 3730

&lt;211&gt; 422

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3730

Met	Ala	Phe	Gly	Ala	Ser	Thr	Phe	Pro	Pro	Gln	Tyr	Leu	Ser	Ser	Glu
1			5					10					15		
Ile	Thr	Leu	His	Pro	Tyr	Ala	Tyr	Ser	Pro	Tyr	Thr	Leu	Asp	Ser	Thr
			20					25					30		
Gln	Asn	Val	Tyr	Ser	Val	Pro	Gly	Ser	Gln	Tyr	Leu	Tyr	Asn	Gln	Pro

35 40 45  
Ser Cys Tyr Arg Gly Phe Gln Thr Val Lys His Arg Asn Glu Asn Thr  
50 55 60  
Cys Pro Leu Pro Gln Glu Met Lys Ala Leu Phe Lys Lys Lys Thr Tyr  
65 70 75 80  
Asp Glu Lys Lys Thr Tyr Asp Gln Gln Lys Phe Asp Ser Glu Arg Ala  
85 90 95  
Asp Gly Thr Ile Ser Ser Glu Ile Lys Ser Ala Arg Gly Ser His His  
100 105 110  
Leu Ser Ile Tyr Ala Glu Asn Ser Leu Lys Ser Asp Gly Tyr His Lys  
115 120 125  
Arg Thr Asp Arg Lys Ser Arg Ile Ile Ala Lys Asn Val Ser Thr Ser  
130 135 140  
Lys Pro Glu Phe Glu Phe Thr Thr Leu Asp Phe Pro Glu Leu Gln Gly  
145 150 155 160  
Ala Glu Asn Asn Met Ser Glu Ile Gln Lys Gln Pro Lys Trp Gly Pro  
165 170 175  
Val His Ser Val Ser Thr Asp Ile Ser Leu Leu Arg Glu Val Val Lys  
180 185 190  
Pro Ala Ala Val Leu Ser Lys Gly Glu Ile Val Val Lys Asn Asn Pro  
195 200 205  
Asn Glu Ser Val Thr Ala Asn Ala Ala Thr Asn Ser Pro Ser Cys Thr  
210 215 220  
Arg Glu Leu Ser Trp Thr Pro Met Gly Tyr Val Val Arg Gln Thr Leu  
225 230 235 240  
Ser Thr Glu Leu Ser Ala Ala Pro Lys Asn Val Thr Ser Met Ile Asn  
245 250 255  
Leu Lys Thr Ile Ala Ser Ser Ala Asp Pro Lys Asn Val Ser Ile Pro  
260 265 270  
Ser Ser Glu Ala Leu Ser Ser Asp Pro Ser Tyr Asn Lys Glu Lys His  
275 280 285  
Ile Ile His Pro Thr Gln Lys Ser Lys Ala Ser Gln Gly Ser Asp Leu  
290 295 300  
Glu Gln Asn Glu Ala Ser Arg Lys Asn Lys Lys Lys Lys Glu Lys Ser  
305 310 315 320  
Thr Ser Lys Tyr Glu Val Leu Thr Val Gln Glu Pro Pro Arg Ile Glu  
325 330 335  
Asp Ala Glu Glu Phe Pro Asn Leu Ala Val Ala Ser Glu Arg Arg Asp  
340 345 350  
Arg Ile Glu Thr Pro Lys Phe Gln Ser Lys Gln Gln Pro Gln Asp Asn  
355 360 365  
Phe Lys Asn Asn Val Lys Lys Ser Gln Leu Pro Val Gln Leu Asp Leu  
370 375 380  
Gly Gly Met Leu Thr Ala Leu Glu Lys Lys Gln His Ser Gln His Ala  
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Lys Gln Ser Ser Lys Pro Val Val Val Ser Val Gly Ala Val Pro Val  
405 410 415  
Leu Ser Lys Glu Cys Ala  
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&lt;210&gt; 3731

&lt;211&gt; 1704

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3731

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<210> 3732  
 <211> 281  
 <212> PRT  
 <213> Homo sapiens

<400> 3732  
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 Glu Gly Ile Thr Asp Ala Ser Ser Cys Ala Val Leu Leu Pro Ala Ser  
 35 40 45  
 Leu Phe Val Asn Ser His Pro Gly Ile Asp Arg Pro Gly Met Leu Cys  
 50 55 60  
 Ser Phe Arg Ile Pro Gly Ala Trp Ser Cys Ala Trp Ser Leu Asn Ile  
 65 70 75 80  
 Gln Ala Asn Asn Cys Phe Ser Thr Gly Leu Ser Arg Arg Val Leu Leu  
 85 90 95  
 Thr Asn Val Val Thr Gly His Arg Gln Ser Phe Gly Thr Asn Ser Asp  
 100 105 110  
 Val Leu Ala Gln Gln Phe Ala Leu Met Ala Pro Leu Leu Phe Asn Gly  
 115 120 125  
 Cys Arg Ser Gly Glu Ile Phe Ala Ile Asp Leu Arg Cys Gly Asn Gln  
 130 135 140  
 Gly Lys Gly Trp Lys Ala Thr Arg Leu Phe His Asp Ser Ala Val Thr  
 145 150 155 160  
 Ser Val Arg Ile Leu Gln Asp Glu Gln Tyr Leu Met Ala Ser Asp Met  
 165 170 175  
 Ala Gly Lys Ile Lys Leu Trp Asp Leu Arg Thr Thr Lys Cys Val Arg  
 180 185 190  
 Gln Tyr Glu Gly His Val Asn Glu Tyr Ala Tyr Leu Pro Leu His Val  
 195 200 205  
 His Glu Glu Glu Gly Ile Leu Val Ala Val Gly Gln Asp Cys Tyr Thr  
 210 215 220  
 Arg Ile Trp Ser Leu His Asp Ala Arg Leu Leu Arg Thr Ile Pro Ser  
 225 230 235 240  
 Pro Tyr Pro Ala Ser Lys Ala Asp Ile Pro Ser Val Ala Phe Ser Ser  
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 Gln Asp Leu Tyr Cys Tyr Ser Tyr Ser  
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<210> 3733  
 <211> 515  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 3733

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&lt;210&gt; 3734

&lt;211&gt; 171

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3734

Xaa	Gly	Arg	Ala	Val	Arg	Arg	Val	Thr	Ala	Gly	Thr	Arg	Pro	Gly	Trp	1	5	10	15
Val	Ser	Gly	Ser	Arg	Tyr	Arg	Arg	Gly	Arg	Arg	Arg	Gly	Arg	Leu	Lys	20	25	30	
Gly	Lys	Asp	Pro	Gly	Ser	Ala	Pro	Ser	Ser	Val	Arg	Glu	Arg	Glu	Thr	35	40	45	
Pro	Gly	Ala	Xaa	Pro	Cys	Leu	Pro	Arg	Arg	Gly	Trp	Cys	Val	Pro	Gly	50	55	60	
Asp	Val	Arg	Ser	Ser	Pro	Pro	Leu	Pro	Gly	Trp	Cys	Ala	Leu	Ser	Asp	65	70	75	80
Val	Arg	Ser	Arg	Gly	Arg	Ser	Cys	Pro	Ser	Ala	Pro	Lys	Ala	Ala	Gly	85	90	95	
Gly	Leu	Arg	Ala	Trp	Gly	Arg	Gly	Ser	Gly	Ala	Ala	Arg	Ala	Pro	Ala	100	105	110	
Pro	Ala	Pro	Ser	Pro	Ser	Ser	Gly	Xaa	Ser	Pro	Ser	Ser	Arg	Thr	Pro	115	120	125	
Arg	Asp	Trp	Ser	Ala	Ser	Arg	Cys	Trp	Thr	Trp	Ser	Gly	Ala	Ala	Thr	130	135	140	
Ala	Pro	Thr	Pro	Phe	Ser	Pro	Ala	Gln	Gln	Pro	Pro	Ser	Ser	His	Asp	145	150	155	160
Gly	Leu	Ser	Leu	Asp	Pro	Ser	Gln	Leu	Glu	Pro						165	170		

&lt;210&gt; 3735

&lt;211&gt; 2512

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



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180  
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360  
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 1920  
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&lt;210&gt; 3736

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3736

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Ser	Gly	Arg	Pro	Ser	Ala	Thr	Gln	Lys	Lys	Lys	Met	Lys	Lys	Arg	Val
			20					25						30	
Lys	Asp	Glu	Leu	Arg	Lys	Leu	Asn	Thr	Met	Pro	Ala	Ala	Glu	Ala	Asn
		35					40					45			
Glu	Ile	Glu	Asp	Val	Trp	His	Leu	Asp	Leu	Ser	Ser	Arg	Trp	Gln	Leu
	50					55				60					
Tyr	Arg	Leu	Trp	Leu	Gln	Leu	Tyr	Gln	Ala	Asp	Thr	Pro	Pro	Gly	Lys
65					70					75				80	
Ile	Leu	Ser	Tyr	Glu	Arg	Gln	Tyr	Arg	Thr	Ser	Ala	Glu	Arg	Met	Ala
			85					90					95		
Glu	Leu	Arg	Leu	Gln	Glu	Asp	Leu	His	Ile	Leu	Lys	Asp	Ala	Gln	Val
			100					105					110		
Val	Gly	Met	Thr	Thr	Thr	Gly	Ala	Ala	Lys	Tyr	Arg	Gln	Ile	Leu	Gln

	115		120		125										
Lys	Val	Glu	Pro	Arg	Ile	Val	Ile	Val	Glu	Glu	Ala	Ala	Glu	Val	Leu
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Glu	Ala	His	Thr	Ile	Ala	Thr	Leu	Ser	Lys	Ala					
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<210> 3737  
 <211> 1046  
 <212> DNA  
 <213> Homo sapiens

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<210> 3738  
 <211> 348  
 <212> PRT  
 <213> Homo sapiens

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Gly Leu Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile  
35 40 45  
Phe Leu His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg  
50 55 60  
Ala Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala  
65 70 75 80  
Arg Ile Asp Ala Ala Ala Phe Thr Gly Leu Ala Leu Leu Gly Ala Leu  
85 90 95  
Asp Leu Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe  
100 105 110  
His Gly Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu  
115 120 125  
Gln Glu Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr  
130 135 140  
Leu Tyr Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe  
145 150 155 160  
Arg Asp Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile  
165 170 175  
Ser Ser Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg  
180 185 190  
Leu Leu Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe  
195 200 205  
Arg Asp Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu  
210 215 220  
Ser Ala Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr  
225 230 235 240  
Leu Arg Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro  
245 250 255  
Leu Trp Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro  
260 265 270  
Cys Ser Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala  
275 280 285  
Ala Asn Asp Leu Gln Gly Cys Ala Val Ala Thr Gly Pro Tyr His Pro  
290 295 300  
Ile Trp Thr Gly Arg Ala Thr Asp Glu Glu Pro Leu Gly Leu Pro Lys  
305 310 315 320  
Cys Cys Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly  
325 330 335  
Arg Pro Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg  
340 345

&lt;210&gt; 3739

&lt;211&gt; 1252

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3739

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540  
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<210> 3740

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3740

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			20					25					30		
Ser	Thr	Glu	Ala	Pro	Gly	His	Pro	Gln	Glu	Asp	Gly	Lys	Gly	Gln	Leu
	35						40				45				
Ala	Gly	Glu	Ser	Pro	Gly	His	Arg	Glu	Pro	Ser	Pro	Gly	Ser	Lys	Gln

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Asp Leu Pro Ser Asp Cys Leu Arg Asn Ala Gly Trp Thr Ser Arg Asn
65      70      75      80
Phe Pro Phe Thr Gly Gln Pro Ala Ala Ala Pro Pro Arg Leu Gly Pro
      85      90      95
Ala Pro Gly Ala Ala Asp Arg Pro Ser Arg Val Pro Lys Ser Pro Ala
      100      105      110
Leu Ala Gln Lys Leu Gly Gln Pro Arg Asp Pro His Leu Pro Leu Pro
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Ile Ser Pro Leu Ser Gln Pro Pro Pro Ser Pro
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<210> 3741  
 <211> 562  
 <212> DNA  
 <213> Homo sapiens

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240
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<210> 3742  
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 <212> PRT  
 <213> Homo sapiens

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<400> 3742
Met Gly Trp Arg Asn Cys Phe Arg Leu Ala Pro Cys Cys Trp Lys Arg
1      5      10      15
Ala Glu Ala Ala Glu Met Asn Pro Val Cys Glu Arg Arg Ala Leu Ser
      20      25      30
Pro Ala Arg Ala Cys Ser Pro Arg Gly Trp Gly Leu Trp Ser Phe Gln
      35      40      45
Ser Cys Ser Leu Arg Ile Pro Ser Gln Gly His Phe Ala Leu Gly Ser
      50      55      60
Pro Ala Ser Leu Leu Ala Asp Cys Gly Arg Ile Arg Gly Ser Ile Leu

```

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65              70              75              80
Tyr Asp Cys Pro Asn Cys Val Gln Phe Phe Leu Ser Phe Glu Tyr Glu
              85              90              95
Val Trp Ser Glu Lys Arg Leu Ser Gln Ala Trp Ala Ala Leu Ser Gly
              100              105              110
Thr His Ser Gln Trp Glu Phe Trp Val Gly Phe Arg Arg His Arg Ser
              115              120              125
Ala Gly Glu Gly Phe Leu Gly Thr Gln Gly
              130              135

```

<210> 3743  
 <211> 468  
 <212> DNA  
 <213> Homo sapiens

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<400> 3743
nntcatgagc cttcttaca gctccatttt ggcaaggcgc tgacaatggc ggaggctgaa
60
ggcaatgcaa gctgcacagt cagtctaggg ggtgccaata tggcagagac ccacaaagcc
120
atgatcctgc aactcaatcc cagtgagaac tgcacctgga caatagaaag accagaaaac
180
aaaagcatca gaattatctt ttcctatgtc cagcttgatc cagatggaag ctgtgaaagt
240
gaaaacatta aagtctttga cggaacctcc agcaatgggc ctctgctagg gcaagtctgc
300
agtaaaaacg actatgttcc tgtatttgaa tcatcatcca gtacattgac gtttcaaata
360
gttactgact cagcaagaat tcaaagaact gtctttgtgt tctagtagtt cttatttcct
420
aacatcttta ttccaaagtg tggcgggttac ctggatccct ggaaggat
468

```

<210> 3744  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

```

<400> 3744
Xaa His Glu Pro Ser Tyr Lys Leu His Phe Gly Lys Ala Leu Thr Met
1              5              10              15
Ala Glu Ala Glu Gly Asn Ala Ser Cys Thr Val Ser Leu Gly Gly Ala
              20              25              30
Asn Met Ala Glu Thr His Lys Ala Met Ile Leu Gln Leu Asn Pro Ser
              35              40              45
Glu Asn Cys Thr Trp Thr Ile Glu Arg Pro Glu Asn Lys Ser Ile Arg
              50              55              60
Ile Ile Phe Ser Tyr Val Gln Leu Asp Pro Asp Gly Ser Cys Glu Ser
65              70              75              80
Glu Asn Ile Lys Val Phe Asp Gly Thr Ser Ser Asn Gly Pro Leu Leu
              85              90              95
Gly Gln Val Cys Ser Lys Asn Asp Tyr Val Pro Val Phe Glu Ser Ser
              100              105              110
Ser Ser Thr Leu Thr Phe Gln Ile Val Thr Asp Ser Ala Arg Ile Gln

```

115  
Arg Thr Val Phe Val Phe  
130

120

125

<210> 3745  
<211> 345  
<212> DNA  
<213> Homo sapiens

<400> 3745  
acgcgtcgaa aggggaagagc agaggacgct ggctctcatg gcaggatggt gtgtgtacgg  
60  
gacgctgtgg gagaggaaaa cagccacatg tgggctggct gcttggagga gacacatgag  
120  
ccgtgaacac gtctcccccg gccgctccct ggttccatgc gtgctcgtct tgggcaccac  
180  
gagaacacag ccatgcagcc cccgatcctg cagccacagc cacggcatcg cctggtcgga  
240  
tgcagcatct gctccggacg cctctcgtg tgggtgccag gcctgccagg ccaagccccg  
300  
attctcaggg gcggcaggag gtgggaggca cgtttgggcg gatcc  
345

<210> 3746  
<211> 102  
<212> PRT  
<213> Homo sapiens

<400> 3746  
Met Ala Gly Trp Cys Val Tyr Gly Thr Leu Trp Glu Arg Lys Thr Ala  
1 5 10 15  
Thr Cys Gly Leu Ala Ala Trp Arg Arg His Met Ser Arg Glu His Val  
20 25 30  
Ser Pro Gly Arg Ser Leu Val Pro Cys Val Leu Val Leu Gly Thr Thr  
35 40 45  
Arg Thr Gln Pro Cys Ser Pro Arg Ser Cys Ser His Ser His Gly Ile  
50 55 60  
Ala Trp Ser Asp Ala Ala Ser Ala Pro Asp Ala Ser Arg Cys Arg Cys  
65 70 75 80  
Gln Ala Cys Gln Ala Lys Pro Arg Phe Ser Gly Ala Ala Gly Gly Gly  
85 90 95  
Arg His Val Trp Ala Asp  
100

<210> 3747  
<211> 800  
<212> DNA  
<213> Homo sapiens

<400> 3747  
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60  
cgcgccggac cctgggatgc tcttcggccg catcccgtg cgctacgcca tactggtgag  
120



aagggggcgc gcccggccac tttctgcctg agccccgcac cctctctggt ggtctcctct  
 180  
 ggggcgcccc tgccaatccc cgcttcccc tcccgcagat gcagatgcgc ttcgatggac  
 240  
 gcctgggctt ccccggcgga ttcgtggaca cgcaggacag aagcctagag gacgggctga  
 300  
 accgcgagct gcgcgaggag ctgggcgaag cggctgccgc tttccgcgtg gagcgactg  
 360  
 actaccgcag ctcccacgtc ggggtcaggg ccacgcgttg tggcccactt ctatgccaag  
 420  
 cgtctgacgc tcgaggagct gttggctgtg gaggccggcg caacacgcgc caaggaccac  
 480  
 gggctggagg tgggaccagc ctgggactct gtccctttcc caatttcctc ttctcccaa  
 540  
 gctttctctc cccaagaaa gcatccctgg agaaaagtct ttgcccctct gaccttgccc  
 600  
 tctcccagc tttcttggtg gagttgggat cgtgatcatc tatactctga attagtactg  
 660  
 ccaacctggg ctttctgtaa aggtctttcc caccctttac caggagagat cctttctaga  
 720  
 acacactcat ccatgtctct ctgctgttcc ctattgacag tgtgatagat tatcacatta  
 780  
 tctaggtgtg gcaacctagg  
 800

<210> 3748  
 <211> 138  
 <212> PRT  
 <213> Homo sapiens

<400> 3748  
 Met Gln Met Arg Phe Asp Gly Arg Leu Gly Phe Pro Gly Gly Phe Val  
 1 5 10 15  
 Asp Thr Gln Asp Arg Ser Leu Glu Asp Gly Leu Asn Arg Glu Leu Arg  
 20 25 30  
 Glu Glu Leu Gly Glu Ala Ala Ala Ala Phe Arg Val Glu Arg Thr Asp  
 35 40 45  
 Tyr Arg Ser Ser His Val Gly Val Arg Ala Thr Arg Cys Gly Pro Leu  
 50 55 60  
 Leu Cys Gln Ala Ser Asp Ala Arg Gly Ala Val Gly Cys Gly Gly Arg  
 65 70 75 80  
 Arg Asn Thr Arg Gln Gly Pro Arg Ala Gly Gly Gly Thr Ser Leu Gly  
 85 90 95  
 Leu Cys Pro Phe Pro Asn Phe Leu Phe Ser Gln Ser Phe Leu Ser Pro  
 100 105 110  
 Lys Lys Ala Ser Leu Glu Lys Ser Leu Cys Pro Ser Asp Leu Ala Leu  
 115 120 125  
 Ser Pro Ala Phe Leu Val Glu Leu Gly Ser  
 130 135

<210> 3749  
 <211> 648  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 3749

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 60  
 ccacaacagc acgagtggcc tcccctgctg cagttacggc ctgaggatgt cggcttcgac  
 120  
 ggctactcca tgcctcggga gggatcgaca agcaagcaga tgccccccag tgatgctgaa  
 180  
 ggtgaccgcg tgatgaacat gctgatgagg ctgcaggagg cagccaacta ctccagcccc  
 240  
 cagagctatg acagcgactc caacagcaac agccatcacg atgacatctt ggactcctct  
 300  
 ttggagtcca ctctgtgaca ggggcccgga gccagcgcc ctctcttct cctcaccgca  
 360  
 ttccacctgc atccccaca tcacctgaa gatgacttcc tgagccagcc cccagccaca  
 420  
 gccttagagc tgcgggaaca ccgagacccc ccgtccttca gcctcgacct gggcgcaggc  
 480  
 atcccgggccc agctgcctgc ggaccgcttc cttccacagc gagaactgca ctaccttctg  
 540  
 ttgtacttta attattgttt tgccttgttg ctgtgacctc cctaagacac tgaagatact  
 600  
 tctcgggaaa ggatcatcgc cgttgaaatg aaaaaaaaaa aaaaaaaaaa  
 648

&lt;210&gt; 3750

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3750

Arg	Ala	Pro	Trp	Glu	Asp	Pro	Ala	Lys	Trp	Val	Met	Asp	Thr	Tyr	Pro
1				5				10						15	
Trp	Ala	Ala	Ser	Pro	Gln	Gln	His	Glu	Trp	Pro	Pro	Leu	Leu	Gln	Leu
			20					25					30		
Arg	Pro	Glu	Asp	Val	Gly	Phe	Asp	Gly	Tyr	Ser	Met	Pro	Arg	Glu	Gly
		35					40					45			
Ser	Thr	Ser	Lys	Gln	Met	Pro	Pro	Ser	Asp	Ala	Glu	Gly	Asp	Pro	Leu
	50				55						60				
Met	Asn	Met	Leu	Met	Arg	Leu	Gln	Glu	Ala	Ala	Asn	Tyr	Ser	Ser	Pro
65					70				75					80	
Gln	Ser	Tyr	Asp	Ser	Asp	Ser	Asn	Ser	Asn	Ser	His	His	Asp	Asp	Ile
			85					90						95	
Leu	Asp	Ser	Ser	Leu	Glu	Ser	Thr	Leu							
			100					105							

&lt;210&gt; 3751

&lt;211&gt; 554

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3751

gcgcgcctgt ctgccctcgc acgtgcgctg gcagggccgc cgcctcgccc tcaccatgga  
 60

cctggccccg ctgctgctcg cggctcggtc gccccgagcg gggccaaggg cgtttcctac  
120  
acgcagggcc agagtccgga gccgcggacc cgcgaggtat ttctactacg tggaccacca  
180  
gggccagctt ttcttgatg attccaaaat gaagaatttc atcacctgct tcaaagaccc  
240  
gcagttcctg gtcaccttct tctcccgctt gagaccaaac cgcagcgggc gctacgaggc  
300  
cgctttcccc ttctctcgc cctgcggcag agagcgcaac ttctgctgct gcgaggaccg  
360  
gccggtggtc ttcacgcacc tgctgaccgc ggaccacggg cctccgcgcc tctcctactg  
420  
cggcgggtggc gaggccctgg ccgtgccctt cgagccggcg cgcctgctgc ccctggccgc  
480  
caacgggcgc ctgtaccacc cggcgccgga gcgtgcgggc ggcgtgggccc tgggtgcgcc  
540  
ttcgccctg gcc  
554

<210> 3752  
<211> 66  
<212> PRT  
<213> Homo sapiens

<400> 3752  
Ala Arg Leu Ser Ala Leu Ala Arg Ala Leu Ala Gly Pro Pro Pro Arg  
1 5 10 15  
Pro His His Gly Pro Gly Pro Ala Ala Ala Arg Gly Ser Val Ala Pro  
20 25 30  
Ser Gly Ala Lys Gly Val Ser Tyr Thr Gln Gly Gln Ser Pro Glu Pro  
35 40 45  
Arg Thr Arg Glu Val Phe Leu Leu Arg Gly Pro Pro Gly Pro Ala Phe  
50 55 60  
Pro Gly  
65

<210> 3753  
<211> 1426  
<212> DNA  
<213> Homo sapiens

<400> 3753  
nnaattcgga acaggtgcag tacttgctct aactttgccg cagctgcctc ccttctctcg  
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gaaccactc tcctaaccac cccccgagag gcggagagaa tgtgggagca cttcagagag  
120  
gcctaggctc cggagatcgg gccatctggg ctctgaaagc aaattagttt tccaactcat  
180  
gtctggctcc ggcgttacc agacgcctgg aaggctcttc ctgcagtctg atcaccattt  
240  
ttctgctgc actgaccaat cagctccctt tggccttcaa cctcgggaat gatggattag  
300  
gggagtctag aaatggacga agccctagaa acgcagctga agacgagcag aggacgcttc  
360

tcggctacag aatccctccc caccttggag ctcttatctc aggtggacat ggactgcagg  
 420  
 gtccacatgc gacccatcgg cctgacgtgg gtgctgcaac tgaccttggc atggatcctg  
 480  
 ctagaagcct gtggagggag ccgcccactc caagccaggt cccagcaaca ccatgggctg  
 540  
 gcagctgac tgggcaaagg caagctgcac ctggcaggac cttgttgtcc ctcagagatg  
 600  
 gacacaacag agacatcggg ccctggaaac catccagaac gctgtggagt gccgagccct  
 660  
 gaatgcgaat ccttcctgga acacctccaa cgtgcccttc gcagtcgctt ccgcctgcgg  
 720  
 ctattggggg tacgccaggc acagccgctc tgcgaggagc tctgccaggc ctggttcgc  
 780  
 aactgcgaag atgatatcac ctgcggcccc acttggtctc cactctcaga aaaaaggggc  
 840  
 tgtgagccca gctgccttac ctatggacag accttcgcag acgggacgga cctttgtcgc  
 900  
 tcggctctgg gccacgcctt accggtggct gctcctggag cccgtcactg cttcaacatc  
 960  
 tccatctccg cggtagctcg tcccagacca ggacgacggg gccgggaagc tccctcccgg  
 1020  
 cgttcccga gccctcgcac ctccatcctg gacgctgcgg gcagcgggag tggcagtgga  
 1080  
 agcggcagcg gccctagcgg gacgcgtggc cctgagttgg gggagcgacc cttccccag  
 1140  
 ccccgccctt caggacaccc agaaccacac ccctcgctct ctcggccttc tgtaatagtt  
 1200  
 ttgagatgtc tgtccctcct ccctggagct ccagagaccc acccctctcc aggttatccc  
 1260  
 agaaatgacc caactctctc acttttccct ctcccccttg aataaagtcg ccagctaaaa  
 1320  
 aaaaagtcca tgtccacctg agataagagc tgttggctgg attggggggg ccacatgcga  
 1380  
 cccatcgggc tgacgtgggt gctgcaactg acctcggcat ggatcc  
 1426

&lt;210&gt; 3754

&lt;211&gt; 261

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3754

Met	Asp	Glu	Ala	Leu	Glu	Thr	Gln	Leu	Lys	Thr	Ser	Arg	Gly	Arg	Phe
1				5					10					15	
Ser	Ala	Thr	Glu	Ser	Leu	Pro	Thr	Leu	Glu	Leu	Leu	Ser	Gln	Val	Asp
			20					25					30		
Met	Asp	Cys	Arg	Val	His	Met	Arg	Pro	Ile	Gly	Leu	Thr	Trp	Val	Leu
		35					40					45			
Gln	Leu	Thr	Leu	Ala	Trp	Ile	Leu	Leu	Glu	Ala	Cys	Gly	Gly	Ser	Arg
	50					55					60				
Pro	Leu	Gln	Ala	Arg	Ser	Gln	Gln	His	His	Gly	Leu	Ala	Ala	Asp	Leu
65				70						75				80	
Gly	Lys	Gly	Lys	Leu	His	Leu	Ala	Gly	Pro	Cys	Cys	Pro	Ser	Glu	Met

				85					90					95					
Asp	Thr	Thr	Glu	Thr	Ser	Gly	Pro	Gly	Asn	His	Pro	Glu	Arg	Cys	Gly				
			100					105					110						
Val	Pro	Ser	Pro	Glu	Cys	Glu	Ser	Phe	Leu	Glu	His	Leu	Gln	Arg	Ala				
		115					120						125						
Leu	Arg	Ser	Arg	Phe	Arg	Leu	Arg	Leu	Leu	Gly	Val	Arg	Gln	Ala	Gln				
	130					135					140								
Pro	Leu	Cys	Glu	Glu	Leu	Cys	Gln	Ala	Trp	Phe	Ala	Asn	Cys	Glu	Asp				
145					150				155					160					
Asp	Ile	Thr	Cys	Gly	Pro	Thr	Trp	Leu	Pro	Leu	Ser	Glu	Lys	Arg	Gly				
			165					170					175						
Cys	Glu	Pro	Ser	Cys	Leu	Thr	Tyr	Gly	Gln	Thr	Phe	Ala	Asp	Gly	Thr				
		180				185							190						
Asp	Leu	Cys	Arg	Ser	Ala	Leu	Gly	His	Ala	Leu	Pro	Val	Ala	Ala	Pro				
	195					200						205							
Gly	Ala	Arg	His	Cys	Phe	Asn	Ile	Ser	Ile	Ser	Ala	Val	Pro	Arg	Pro				
	210					215					220								
Arg	Pro	Gly	Arg	Arg	Gly	Arg	Glu	Ala	Pro	Ser	Arg	Arg	Ser	Arg	Ser				
225					230				235					240					
Pro	Arg	Thr	Ser	Ile	Leu	Asp	Ala	Ala	Gly	Ser	Gly	Ser	Gly	Ser	Gly				
			245					250					255						
Ser	Gly	Ser	Gly	Pro															
			260																

&lt;210&gt; 3755

&lt;211&gt; 3149

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3755

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60  
gctccaagta caagtaacag ccaatcagat ttgttttccg aagagaccac cagtgacaac  
120  
aacaatacct cgataaccac gccaaactctt agtcccagcc agcagccgct tccgacagaa  
180  
ctgaatgtaa cttcaccgag taaagaggag tgtgggcat gcacagacac agctcatgtc  
240  
tcattaatca caccaacaaa aagatcctgt ggtacagatt cacagtctga gaatgaggct  
300  
tcaccagtaa aacggccacg actacttgag aatacggaaac ggtccgagga aaccagtcga  
360  
tctaaacaga agagtcgacg tcggtgcttc cagtgccaaa ccaaactgga gctgggtgcag  
420  
caggaattgg gatcgtgtcg ctgcggttat gtgttctgta tgttacatcg cctccccgag  
480  
cagcacgact gcacattcga ccacatgggc cgtggccggg aggaagccat catgaaaatg  
540  
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600  
aggccaggca tggccaccac gtgacgctgt tcttagttca ctaatgtag ccttatttag  
660  
gacaaagtca gccagacacc ttgtactggg cagcgctcag actgcagcca gtccgtttcc  
720

tttcttttagc cagccatcct ggtactgtag tttagggggtt gatgggtgggtt gaaattgatt  
780  
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840  
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900  
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960  
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1020  
atcggccttt cacctcttca cttatcctta gtcccagtag ccaggatacc tgatggccac  
1080  
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1140  
tcactctccc acagagctgg aaatgggggg tgggggacag attcttacgg aaattttttt  
1200  
acctgacttg ctatgaaaaa actcatcaca caagaagaga aacagtaacc tcactttgaa  
1260  
aattagctcc actcaagact agtccacgaa cgagaccgc cttttctaca caggatccaa  
1320  
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1380  
gcagggatct ggcacggacc agatgtggcg aatggcagca cagcgcggtg gctgggtctg  
1440  
cacactggcc tctgcagcca gatttctata ttgggagttt tttaaaaaga catttcatag  
1500  
ccaacaagaa tcagtagaag tgctgggagc agcagctggg gaagctgccg cccacgggct  
1560  
ctgccccttc cagctggagc cgcccgtgcc tccaggggcc aagaggatga tgtcgtggcc  
1620  
tccattctcg tttctatgca gcccatagt ccaaggacac ccagtccaca tctaccatat  
1680  
agcaagttta gtaaggaag gcagcatagc tcccaggac agtgggtttg gatctgtcta  
1740  
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1800  
gcctgagggg acatttctcc acctgtgccc cctcatgttc acagaggatt tcagcagctg  
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1920  
tcactaccag tcaggtgggg ctggggctgg gtggacagga tcaggattcc cttgaaagcc  
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2040  
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2100  
cccagcaact ttccttttta taaaacaaca aatgggtcaa ctctgtctgc aaattaacag  
2160  
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2220  
cttcccaccc tccaccaccc agagtggaac ccgctgcaaa atccccagcc ttaattcttg  
2280  
cttcaggacc cagaccggtg tcttgctcta gggcaacca gggcagaggg gccagggtctg  
2340

cccagcgttt accactgctg tcaagccaca gcccttgccc accatacggg ccatcctcag  
 2400  
 tgaggcagcc ccccataggc ttccgccaag ctctgggtccc gaagaggctg tgcgagccct  
 2460  
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 2520  
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 2580  
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 2640  
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 2700  
 ttgtgttcta gatttactta cacacatagc ctagagctca gttttagttt taacattgtg  
 2760  
 aaaatattaa aagaatcttg taactttatt cttttttctc ctgctgaaaa aaaaaattaa  
 2820  
 accaatcgta tgaaagtttg gttttcttgt ttcacccctt ctctaagtg cccctgggt  
 2880  
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 2940  
 agagaccgtc tgcagtactt ggaggcactc gtccagttag tgtccaggct aaacagccgc  
 3000  
 ttccttgctt tctgttgga gcctctgccc tgggaagctg cgggactggc cttggggtaa  
 3060  
 aggtgggtct gcagggccaa gcctgtgcca gcagccagga ggttacacac tgggggggat  
 3120  
 cagaaaacga gccccagccc tgaggggccc  
 3149

<210> 3756  
 <211> 199  
 <212> PRT  
 <213> Homo sapiens

<400> 3756  
 Met Asn Leu Cys Ser Lys Cys Phe Ala Asp Phe Gln Lys Lys Gln Pro  
 1 5 10 15  
 Asp Asp Asp Ser Ala Pro Ser Thr Ser Asn Ser Gln Ser Asp Leu Phe  
 20 25 30  
 Ser Glu Glu Thr Thr Ser Asp Asn Asn Thr Ser Ile Thr Thr Pro  
 35 40 45  
 Thr Leu Ser Pro Ser Gln Gln Pro Leu Pro Thr Glu Leu Asn Val Thr  
 50 55 60  
 Ser Pro Ser Lys Glu Glu Cys Gly Pro Cys Thr Asp Thr Ala His Val  
 65 70 75 80  
 Ser Leu Ile Thr Pro Thr Lys Arg Ser Cys Gly Thr Asp Ser Gln Ser  
 85 90 95  
 Glu Asn Glu Ala Ser Pro Val Lys Arg Pro Arg Leu Leu Glu Asn Thr  
 100 105 110  
 Glu Arg Ser Glu Glu Thr Ser Arg Ser Lys Gln Lys Ser Arg Arg Arg  
 115 120 125  
 Cys Phe Gln Cys Gln Thr Lys Leu Glu Leu Val Gln Gln Glu Leu Gly  
 130 135 140  
 Ser Cys Arg Cys Gly Tyr Val Phe Cys Met Leu His Arg Leu Pro Glu

145		150		155		160									
Gln	His	Asp	Cys	Thr	Phe	Asp	His	Met	Gly	Arg	Gly	Arg	Glu	Glu	Ala
				165					170					175	
Ile	Met	Lys	Met	Val	Lys	Leu	Asp	Arg	Lys	Val	Gly	Arg	Ser	Cys	Gln
			180					185					190		
Arg	Ile	Gly	Glu	Gly	Cys	Ser									
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 <212> DNA  
 <213> Homo sapiens

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 <211> 199  
 <212> PRT



<213> Homo sapiens

<400> 3758

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Gly Lys Ser Gly Leu Leu Thr Ser His Thr Thr Asp Ser Leu Gln Leu
 35          40          45
Trp Phe Val Arg Leu Ala Leu Leu Val Lys Leu Gly Leu Phe Gln Asn
 50          55          60
Ala Glu Met Glu Phe Glu Pro Phe Gly Asn Leu Asp Gln Pro Asp Leu
 65          70          75          80
Tyr Ser Glu Tyr Tyr Pro His Val Tyr Pro Gly Arg Arg Gly Ser Met
 85          90          95
Val Pro Phe Ser Met Arg Ile Leu His Ala Glu Leu Gln Gln Tyr Leu
 100         105         110
Gly Asn Pro Gln Glu Ser Leu Asp Arg Leu His Lys Val Lys Thr Val
 115         120         125
Cys Ser Lys Val Gly Gly Ala Val Ile Leu Pro Cys His Gly Glu Asn
 130         135         140
Met Pro Ser Thr Pro Ser Pro Gln Asp Met Pro Val Leu Phe Pro Ala
 145         150         155         160
Arg Pro Ala Pro Cys Thr Ile Ala Ala Ser Ala Phe Arg Arg Leu Gly
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<210> 3759

<211> 830

<212> DNA

<213> Homo sapiens

<400> 3759

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420
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540

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&lt;210&gt; 3760

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3760

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			20					25					30		
Cys	Asp	Arg	Glu	Leu	Tyr	Pro	Gly	Glu	Pro	Arg	Leu	His	Leu	Ser	Ala
		35					40					45			
Pro	Gly	Pro	Ala	Ser	His	Gln	Asp	Gln	Pro	Glu	Trp	Gln	Glu	Asp	Met
	50					55					60				
Gly	Arg	Thr	Gly	Gly	Gly	Gly	Cys	Gly	His	Pro	Ser	Phe	Asn	Gln	Met
65				70					75					80	
Leu	Asp	Val	Lys	Gly	Pro	Ile	Pro	Val	Lys	Arg	Gly	Gly	Gln	Ala	Leu
				85					90					95	
Phe	Val	Leu	Leu												
			100												

&lt;210&gt; 3761

&lt;211&gt; 458

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3761

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458

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 <211> 75  
 <212> PRT  
 <213> Homo sapiens

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 <212> DNA  
 <213> Homo sapiens

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<210> 3764  
 <211> 288  
 <212> PRT  
 <213> Homo sapiens

<400> 3764  
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 35 40 45  
 Asn Gly Gly Ala Ser Glu Ala Gly Glu Asp Arg Glu Ala Pro Gly Lys  
 50 55 60  
 Arg Arg Arg Leu Gly Phe Leu Ala Thr Ala Trp Leu Thr Phe Tyr Asp  
 65 70 75 80  
 Ile Ala Met Thr Ala Gly Trp Leu Val Leu Ala Ile Ala Met Val Arg  
 85 90 95  
 Phe Tyr Met Glu Lys Gly Thr His Arg Gly Leu Tyr Lys Ser Ile Gln  
 100 105 110  
 Lys Thr Leu Lys Phe Phe Gln Thr Phe Ala Leu Leu Glu Ile Val His  
 115 120 125  
 Cys Leu Ile Gly Ile Val Pro Thr Ser Val Ile Val Thr Gly Val Gln  
 130 135 140  
 Val Ser Ser Arg Ile Phe Met Val Trp Leu Ile Thr His Ser Ile Lys  
 145 150 155 160  
 Pro Ile Gln Asn Glu Glu Ser Val Val Leu Phe Leu Val Ala Trp Thr  
 165 170 175  
 Val Thr Glu Ile Thr Arg Tyr Ser Phe Tyr Thr Phe Ser Leu Leu Asp  
 180 185 190  
 His Leu Pro Tyr Phe Ile Lys Trp Ala Arg Tyr Asn Phe Phe Ile Ile  
 195 200 205  
 Leu Tyr Pro Val Gly Val Ala Gly Glu Leu Leu Thr Ile Tyr Ala Ala  
 210 215 220  
 Leu Pro Tyr Val Lys Lys Thr Gly Met Phe Ser Ile Arg Leu Pro Asn  
 225 230 235 240  
 Lys Tyr Asn Val Ser Phe Asp Tyr Tyr Tyr Phe Leu Leu Ile Thr Met

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			260					265					270						
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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 3766

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 <212> PRT  
 <213> Homo sapiens

<400> 3766

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			20					25					30		
Arg	Arg	Arg	Arg	Gly	Pro	Ile	Gly	Arg	Val	Asn	Met	Asp	Leu	Glu	Asn
			35				40					45			
Lys	Val	Lys	Lys	Met	Gly	Leu	Gly	His	Glu	Gln	Gly	Phe	Gly	Ala	Pro
	50					55					60				
Cys	Leu	Lys	Cys	Lys	Glu	Lys	Cys	Glu	Gly	Phe	Glu	Leu	His	Phe	Trp
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Arg	Lys	Ile	Cys	Arg	Asn	Cys	Lys	Cys	Gly	Gln	Glu	Glu	His	Asp	Val
				85					90					95	
Leu	Leu	Ser	Asn	Glu	Glu	Asp	Arg	Lys	Val	Gly	Lys	Leu	Phe	Glu	Asp
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Thr	Lys	Tyr	Thr	Thr	Leu	Ile	Ala	Lys	Leu	Lys	Ser	Asp	Gly	Ile	Pro
			115				120						125		
Met	Tyr	Lys	Arg	Asn	Val	Met	Ile	Leu	Thr	Asn	Pro	Val	Ala	Ala	Lys
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Lys	Gln	Pro	Val	Ala	Gly	Ser	Glu	Gly	Ala	Gln	Tyr	Arg	Lys	Lys	Gln
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Leu	Ala	Lys	Gln	Leu	Pro	Ala	His	Asp	Gln	Asp	Pro	Ser	Lys	Cys	His
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Glu	Leu	Ser	Pro	Arg	Glu	Val	Lys	Glu	Met	Glu	Gln	Phe	Val	Lys	Lys
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Tyr	Lys	Ser	Glu	Ala	Leu	Gly	Val	Gly	Asp	Val	Lys	Leu	Pro	Cys	Glu
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Met	Asp	Ala	Gln	Gly	Pro	Lys	Gln	Met	Asn	Ile	Pro	Gly	Gly	Asp	Arg
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Ser	Thr	Pro	Ala	Ala	Val	Gly	Ala	Met	Glu	Asp	Lys	Ser	Ala	Glu	His
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His	Pro	Ala	Cys	Phe	Val	Cys	Ser	Thr	Cys	His	Glu	Leu	Leu	Val	Asp
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Cys	Asp	Ser	Glu	Lys	Pro	Arg	Cys	Ala	Gly	Cys	Asp	Glu	Leu	Ile	Phe
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Ser	Asn	Glu	Tyr	Thr	Gln	Ala	Glu	Asn	Gln	Asn	Trp	His	Leu	Lys	His
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Arg	Val	Thr	Tyr	Asn	Asn	Phe	Ser	Trp	His	Ala	Ser	Thr	Glu	Cys	Phe
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Leu	Cys	Ser	Cys	Cys	Ser	Lys	Cys	Leu	Ile	Gly	Gln	Lys	Phe	Met	Pro
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&lt;210&gt; 3767

&lt;211&gt; 2439

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3767

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&lt;211&gt; 379

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3768

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&lt;211&gt; 1931

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3769

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<213> Homo sapiens

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His Pro Val Phe Ser Lys Val Phe Thr Val Asp Tyr Tyr Phe Glu Glu  
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Gly Gln Pro Ala Gln Lys Trp Leu Leu Gln Val Val Met Arg Val Ser  
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Val Asp Val Leu Gly Pro Ala Gly His Cys Ala Lys His Phe Leu Cys  
180 185 190  
Cys Thr Glu Ser Ser His Leu Ala Arg Thr Gly Pro Ser Phe Leu Leu  
195 200 205  
Arg Tyr Asp Asp Leu Cys Leu Pro Trp Ala Thr Ala Gly Ala Val Arg  
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Gln Lys Lys Val Thr Arg Pro Leu Leu Leu Lys Phe Gly Arg Asn Ala  
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Gly Tyr Val Glu Leu Ser Phe Arg Ala Arg Lys Leu Asp Asp Lys Asp  
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Leu Asp Tyr Ile Met Gly Gly Cys Gln Ile Ser Phe Thr Val Ala Ile
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Tyr Ile Ser Pro Arg Gln Pro Asn His Tyr Leu Gln Ala Leu Arg Ala
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Gly Pro Thr Asn Val Ala Pro Ile Ile Ser Lys Val Ala Glu Pro Ala
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Gln Arg Glu Gln Ser Thr Gly Gln Ala Thr Lys Tyr Ser Val Leu Leu
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      565      570      575
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      580      585      590
Gly Asn Ala Asp Phe Ser Asp Met Arg Leu Leu Asp Gly Asp Asp Gly
      595      600      605
Pro Leu Arg Cys Pro Arg Gly Glu Pro Ala Leu Arg Asp Ile Val Gln
      610      615      620
Phe Val Pro Phe Arg Glu Leu Lys Asn Ala Ser Pro Ala Ala Leu Ala
625      630      635      640
Lys Cys Val Leu Ala Glu Val Pro Lys Gln Val Val Glu Tyr Tyr Ser
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His Arg Gly Leu Pro Pro Arg Ser Leu Gly Val Pro Ala Gly Glu Ala
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&lt;210&gt; 3775

&lt;211&gt; 549

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3775

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 Val Lys Glu Tyr Arg Asn Gln Phe Pro Glu Ile Leu Arg Arg Ala Ala  
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 Ala His Leu Glu Cys Ile Phe Arg Phe Glu Leu Arg Glu Leu Asp Pro  
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 Glu Ala His Thr Tyr Ile Leu Leu Asn Lys Leu Gly Pro Val Pro Phe  
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 Glu Gly Leu Glu Glu Ser Pro Asn Gly Pro Lys Met Gly Leu Leu Met  
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<212> PRT  
<213> Homo sapiens

<400> 3778

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Arg Arg Asn Asp Asp Ile Ser Glu Leu Glu Asp Leu Ser Glu Leu Glu  
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Asp Leu Lys Asp Ala Lys Leu Gln Thr Leu Lys Glu Leu Phe Pro Gln  
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245 250 255  
Gly Glu Glu Ser Asn Glu Ser Ala Glu Ser Ser Ser Asn Trp Glu Lys  
260 265 270  
Gln Glu Ser Ile Val Leu Lys Leu Gln Lys Glu Phe Pro Asn Phe Asp  
275 280 285  
Lys Gln Glu Leu Arg Glu Val Leu Lys Glu His Glu Trp Met Tyr Thr  
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Glu Ala Leu Glu Ser Leu Lys Val Phe Ala Glu Asp Gln Asp Met Gln  
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325 330 335  
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Phe Ser Met Lys Ala Gln Asn Gly Phe Asn Lys Lys Arg Lys Lys Asn  
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Val Phe Asn Pro Lys Arg Val Val Glu Asp Ser Glu Tyr Asp Ser Gly



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Val Met Glu Asp Gly Tyr Lys Gly Lys Ile Leu His Phe Leu Gln Asp				400
	405		410	415
Ala Ser Ile Gly Glu Leu Thr Leu Ile Pro Gln Cys Ser Gln Lys Lys				
	420		425	430
Ala Gln Lys Ile Thr Glu Leu Arg Pro Phe Asn Ser Trp Glu Ala Leu				
	435		440	445
Phe Thr Lys Met Ser Lys Thr Asn Gly Leu Ser Glu Asp Leu Ile Trp				
	450		455	460
His Cys Lys Thr Leu Ile Gln Glu Arg Asp Val Val Ile Arg Leu Met				
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	485		490	495
Leu Thr Gly Asn Gly Gly Gly Trp Asn Ile Glu Gln Pro Ser Ile Leu				
	500		505	510
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Met Gly Leu Gly Lys Thr Ile Gln Ala Ile Ala Phe Leu Ala Tyr Leu				
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Gln Ser Ile Tyr Glu Lys Glu Arg Ile Ala His Ala Lys Gln Ile Ile				
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785		790		795
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 885 890 895  
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 Leu Lys His His Gln His Arg Tyr Leu Arg Leu Asp Gly Lys Thr Gln  
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 930 935 940  
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&lt;210&gt; 3779

&lt;211&gt; 1853

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3779

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&lt;210&gt; 3780

&lt;211&gt; 530

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3780

His Arg Glu Lys Glu Asp Ile Lys Ile Thr Lys Glu Arg Thr Pro Glu

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Lys Arg Gln Lys Ile Gln Arg Glu Leu Met Lys Leu Glu Gln Glu Asn  
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Val Val Arg Ser Lys Leu Ser Pro Ser Pro Ser Leu Arg Lys Ser Ser  
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<400> 3782  
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&lt;210&gt; 3784

&lt;211&gt; 804

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3784

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Leu	Leu	Glu	Arg	Val	Glu	Glu	Pro	Val	Leu	Gln	Asn	Gln	Ile	Arg	Glu
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2931

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&lt;210&gt; 3785

&lt;211&gt; 1901

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3785

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&lt;210&gt; 3786

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3786

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Arg	Pro	Gly	Ala	Pro	Glu	Thr	Thr	Ala	Leu	His	Gly	Gly	Phe	Gln	Arg

			100						105					110					
Arg	Tyr	Gly	Gly	Ile	Thr	Asp	Pro	Gly	Thr	Val	Pro	Arg	Val	Pro	Ser				
		115						120					125						
His	Phe	Ser	Arg	Leu	Pro	Leu	Gly	Gly	Trp	Ala	Glu	Asp	Gly	Gln	Ser				
		130					135					140							
Ala	Ser	Arg	His	Pro	Glu	Pro	Val	Pro	Glu	Glu	Gly	Ser	Glu	Asp	Glu				
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&lt;210&gt; 3787

&lt;211&gt; 717

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3787

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&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3788

Met	Leu	Gln	Asn	Thr	Ala	Ser	Ile	Asn	Thr	Glu	Tyr	Thr	Glu	Ser	Leu				
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Cys	Ala	Ser	Ile	Lys	Leu	Arg	His	Gly	Ser	Arg	Ala	Ala	Pro	Pro	Gly				
			20					25					30						
Pro	Trp	Gly	Ala	Lys	Cys	Ser	Trp	Arg	Gln	Val	Ala	Lys	Gly	Glu	His				
		35					40					45							
Leu	Gly	Gln	Thr	Pro	Gly	Phe	Ser	Ser	Arg	Leu	Pro	His	Leu	Pro	Ala				

50		55		60													
Ser	Leu	Leu	Ser	Trp	Leu	Ser	Pro	Ser	Leu	Leu	Val	Cys	Asn	Lys	Gly		
65					70					75					80		
Ala	Ala	Val	Ile	Thr	His	Glu	Gln	Cys	Leu	Ala	Gln	Ser	Gly	Arg	Ser		
			85						90					95			
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 <212> DNA  
 <213> Homo sapiens

<400> 3789  
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<210> 3790  
 <211> 1092  
 <212> PRT  
 <213> Homo sapiens

<400> 3790

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			20					25					30		
Leu	Gln	Val	Leu	Lys	Ala	Gln	Ser	Glu	Asp	Pro	Leu	Pro	Glu	Leu	His
		35					40					45			
Glu	Asp	Leu	His	Asn	Glu	Lys	Glu	Leu	Ile	Lys	Glu	Leu	Glu	Gln	Ser
	50					55					60				
Leu	Ala	Ser	Trp	Thr	Gln	Asn	Leu	Lys	Glu	Leu	Gln	Thr	Met	Lys	Ala
65					70					75					80
Asp	Leu	Thr	Arg	His	Val	Leu	Val	Glu	Asp	Val	Met	Val	Leu	Lys	Glu
				85					90					95	
Gln	Ile	Glu	His	Leu	His	Arg	Gln	Trp	Glu	Asp	Leu	Cys	Leu	Arg	Val
			100					105					110		
Ala	Ile	Arg	Lys	Gln	Glu	Ile	Glu	Asp	Arg	Leu	Asn	Thr	Trp	Val	Val
		115					120					125			
Phe	Asn	Glu	Lys	Asn	Lys	Glu	Leu	Cys	Ala	Trp	Leu	Val	Gln	Met	Glu
	130					135					140				
Asn	Lys	Val	Leu	Gln	Thr	Val	Asp	Ile	Ser	Ile	Glu	Glu	Met	Ile	Glu
145					150					155				160	
Lys	Leu	Gln	Lys	Asp	Cys	Met	Glu	Glu	Ile	Asn	Leu	Phe	Ser	Glu	Asn
				165					170					175	
Lys	Leu	Gln	Leu	Lys	Gln	Met	Gly	Asp	Gln	Leu	Ile	Lys	Ala	Ser	Asn
			180					185					190		
Lys	Ser	Arg	Ala	Ala	Glu	Ile	Asp	Asp	Lys	Leu	Asn	Lys	Ile	Asn	Asp
		195					200						205		
Arg	Trp	Gln	His	Leu	Phe	Asp	Val	Ile	Gly	Ser	Arg	Val	Lys	Lys	Leu
	210					215						220			
Lys	Glu	Thr	Phe	Ala	Phe	Ile	Gln	Gln	Leu	Asp	Lys	Asn	Met	Ser	Asn
225					230					235					240
Leu	Arg	Thr	Trp	Leu	Ala	Arg	Ile	Glu	Ser	Glu	Leu	Ser	Lys	Pro	Val
				245					250					255	
Val	Tyr	Asp	Val	Cys	Asp	Asp	Gln	Glu	Ile	Gln	Lys	Arg	Leu	Ala	Glu
			260					265						270	
Gln	Gln	Asp	Leu	Gln	Arg	Asp	Ile	Glu	Gln	His	Ser	Ala	Gly	Val	Glu
		275					280					285			
Ser	Val	Phe	Asn	Ile	Cys	Asp	Val	Leu	Leu	His	Asp	Ser	Asp	Ala	Cys
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Ala	Asn	Glu	Thr	Glu	Cys	Asp	Ser	Ile	Gln	Gln	Thr	Thr	Arg	Ser	Leu
305					310					315					320
Asp	Arg	Arg	Trp	Arg	Asn	Ile	Cys	Ala	Met	Ser	Met	Glu	Arg	Arg	Met
				325					330					335	
Lys	Ile	Glu	Glu	Thr	Trp	Arg	Leu	Trp	Gln	Lys	Phe	Leu	Asp	Asp	Tyr
			340					345					350		
Ser	Arg	Phe	Glu	Asp	Trp	Leu	Lys	Ser	Ala	Glu	Arg	Thr	Ala	Ala	Cys
		355					360					365			
Pro	Asn	Ser	Ser	Glu	Val	Leu	Tyr	Thr	Ser	Ala	Lys	Glu	Glu	Leu	Lys



370 375 380  
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Glu Leu Ile Asn Lys Gln Tyr Arg Arg Leu Ala Arg Glu Asn Arg Thr  
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Asp Thr Ala Ser Arg Leu Lys Gln Met Val His Glu Gly Asn Gln Arg  
420 425 430  
Trp Asp Asn Leu Gln Arg Arg Val Thr Ala Val Leu Arg Arg Leu Arg  
435 440 445  
His Phe Thr Asn Gln Arg Glu Glu Phe Glu Gly Thr Arg Glu Ser Ile  
450 455 460  
Leu Val Trp Leu Thr Glu Met Asp Leu Gln Leu Thr Asn Val Glu His  
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Phe Ser Glu Ser Asp Ala Asp Asp Lys Met Arg Gln Leu Asn Gly Phe  
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Gln Gln Glu Ile Thr Leu Asn Thr Asn Lys Ile Asp Gln Leu Ile Val  
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675 680 685  
Ala Ser Ser Thr Pro Tyr Lys Pro Pro Tyr Gly Lys Leu Leu Leu Pro  
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Lys Leu Lys Ile Lys Gln Asn Leu Gln Gln Leu Asn Ser Asp Ile Ser  
755 760 765  
Ala Ile Thr Thr Trp Leu Lys Lys Thr Glu Ala Glu Leu Glu Met Leu  
770 775 780  
Lys Met Ala Lys Pro Pro Ser Asp Ile Gln Glu Ile Glu Leu Arg Val  
785 790 795 800  
Lys Arg Leu Gln Glu Ile Leu Lys Ala Phe Asp Thr Tyr Lys Ala Leu

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Pro	Glu	Ser	Thr	Glu	Leu	Gln	Ser	Arg	Leu	Arg	Gln	Leu	Ser	Leu	Leu		
		835					840					845					
Trp	Glu	Ala	Ala	Gln	Gly	Ala	Val	Asp	Ser	Trp	Arg	Gly	Gly	Leu	Arg		
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865				870					875					880			
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			885					890					895				
Thr	Asp	Pro	Lys	Ala	Asp	Pro	Arg	Ala	Leu	Leu	Glu	Cys	Arg	Arg	Glu		
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Leu	Met	Gln	Leu	Glu	Lys	Glu	Leu	Val	Glu	Arg	Gln	Pro	Gln	Val	Asp		
	915					920					925						
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Asp	Cys	Ile	Glu	Ala	Glu	Glu	Lys	Val	His	Val	Ile	Glu	Lys	Lys	Leu		
945				950					955						960		
Lys	Gln	Leu	Arg	Glu	Gln	Val	Ser	Gln	Asp	Leu	Met	Ala	Leu	Gln	Gly		
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Gly	Asp	Gln	Pro	Pro	Ala	Thr	Ser	Val	Pro	Ala	Pro	Arg	Ala	Lys	Gln		
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Ala	Cys	Leu	Leu	Pro	Ser	Ser	Glu	Glu	Asp	Tyr	Ser	Cys	Thr	Gln	Ala		
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Pro	Pro	Pro	Thr														
	1090																

&lt;210&gt; 3791

&lt;211&gt; 1011

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3791

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&lt;210&gt; 3792

&lt;211&gt; 288

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3792

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			20					25						30	
Ala	Leu	Ser	Met	Gly	Gly	Lys	Val	Pro	Val	Ser	Glu	Gly	Leu	Glu	His
			35				40						45		
Ser	Asp	Leu	Pro	Asp	Gly	Thr	Gly	Glu	Phe	Leu	Asp	Ala	Trp	Leu	Met
			50				55					60			
Leu	Val	Glu	Lys	Met	Val	Asn	Pro	Thr	Thr	Val	Leu	Glu	Ser	Pro	His
65					70					75					80
Ser	Leu	Pro	Ala	Lys	Leu	Pro	Gly	Gly	Val	Gln	Asn	Phe	Pro	Gln	Phe
				85					90					95	
Ser	Ala	Leu	Arg	Phe	Leu	Val	Val	Thr	Gln	Lys	Ala	Ala	Phe	Thr	Cys
			100					105					110		
Ile	Lys	Asn	Leu	Trp	Asn	Arg	Lys	Pro	Leu	Lys	Val	Tyr	Gly	Gly	Arg
			115				120					125			
Met	Ala	Glu	Ser	Met	Leu	Ala	Ile	Leu	Cys	His	Ile	Leu	Arg	Gly	Glu
			130			135					140				
Pro	Val	Ile	Arg	Glu	Arg	Leu	Ser	Lys	Glu	Lys	Glu	Gly	Ser	Arg	Gly
145					150					155					160
Glu	Glu	Asp	Thr	Gly	Gln	Glu	Glu	Gly	Gly	Ser	Arg	Arg	Glu	Pro	Gln
				165					170					175	
Val	Asn	Gln	Gln	Gln	Leu	Gln	Gln	Leu	Met	Asp	Met	Gly	Phe	Thr	Arg

			180				185				190				
Glu	His	Ala	Met	Glu	Ala	Leu	Leu	Asn	Thr	Ser	Thr	Met	Glu	Gln	Ala
			195				200				205				
Thr	Glu	Tyr	Leu	Leu	Thr	His	Pro	Pro	Pro	Ile	Met	Gly	Gly	Val	Val
			210				215				220				
Arg	Asp	Leu	Ser	Met	Ser	Glu	Glu	Asp	Gln	Met	Met	Arg	Ala	Ile	Ala
225			230				235				240				
Met	Ser	Leu	Gly	Gln	Asp	Ile	Pro	Met	Asp	Gln	Arg	Ala	Glu	Ser	Pro
			245				250				255				
Glu	Glu	Val	Ala	Cys	Arg	Lys	Glu	Glu	Glu	Glu	Arg	Lys	Ala	Arg	Glu
			260				265				270				
Lys	Gln	Glu	Glu	Glu	Glu	Ala	Lys	Cys	Leu	Lys	Lys	Val	Gln	Gly	Cys
			275				280				285				

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<210> 3793
<211> 360
<212> DNA
<213> Homo sapiens
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gtgtgtgtgt  gtgtgtgtgt  atttatatatt  cagatcacag  gcagatttct  gggctctctgt
120
tactttgtgc  cgggtaggaa  caacagtttc  tttttttctt  ggagacagtg  tttcactctt
180
gttgcccagg  ctggagggca  atggcgcgat  ctcagctcac  tgcaacctcc  gcctttcggg
240
ctcaagagat  tctcctgcct  cagcctccca  agtagctggg  attacaggca  tgcatcacca
300
tgcaccatgc  ccgactaatt  ttgtattttt  agtagagaca  gggttttctc  atgttggtca
360
```

```
<210> 3794
<211> 96
<212> PRT
<213> Homo sapiens
```

```

<400> 3794
Val Tyr Thr His Thr Glu Cys Val Cys Val Cys Val Cys Val Cys Val
 1             5             10             15
Cys Val Phe Ile Phe Gln Ile Thr Gly Arg Phe Leu Gly Leu Cys Tyr
          20             25             30
Phe Val Pro Gly Arg Asn Asn Ser Phe Phe Phe Ser Trp Arg Gln Cys
          35             40             45
Phe Thr Leu Val Ala Gln Ala Gly Gly Gln Trp Arg Asp Leu Ser Ser
          50             55             60
Leu Gln Pro Pro Pro Phe Gly Leu Lys Arg Phe Ser Cys Leu Ser Leu
65             70             75             80
Pro Ser Ser Trp Asp Tyr Arg His Ala Ser Pro Cys Thr Met Pro Asp
          85             90             95

```

```
<210> 3795
<211> 1341
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3795

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60  
cgcaactaca ggtctcatcc caccatcctg gacattccta accagctcta ttatgaaggg  
120  
gagctgcagg cctgtgctga tgctgtggat cgagaacgct tctgccgctg ggcgggccta  
180  
cctcgacagg gctttcccat catctttcac ggcgtaatgg gcaaagatga gcgtgaaggg  
240  
aacagcccat ccttcttcaa ccctgaagag gctgccacag tgacttccta cctgaagctg  
300  
ctcctggccc cctcctccaa gaagggcaaa gcccgctga gccctcgaag tgtgggcgtc  
360  
atctccccgt accggaaaca ggtggagaaa atccgttact gcatcaccaa acttgacagg  
420  
gagcttcgag gactggatga catcaaggac ttgaaggtag gttcagtaga agaattccaa  
480  
ggccaagaac gaagcgtcat cctcatctcc accgtgcgaa gcagccagag ctttgtgcag  
540  
ctggatctgg actttaatct gggtttcctt aagaacccca agaggttcaa thtagctgtg  
600  
accggggcca aggcctgct catcatcgtg gggaaccccc ttctcctggg ccatgaccct  
660  
gactggaaag tattcctgga gttctgtaaa gaaaacggag ggtataccgg gtgtcccttc  
720  
cctgccaac tggacctgca acaggacag aatttactgc aaggctctgag caagctcagc  
780  
ccctctacct cagggcccca cagccatgac tacctcccc aggagcggga ggggtgaaggg  
840  
ggcctgtctc tgcaagtgga gccagagtgg aggaatgagc tctgaagaca cagcaccag  
900  
ccttctcgca ccagccaagc cttactgcc tgcccgaccc tgaaccagaa cccagctgaa  
960  
ctgccccctc aaggacaggg aaggctgggg gagggagttt acaaccaag ccattccacc  
1020  
ccctccccctg ctggggagaa tgacacatca agctgctaac aattggggga aggggaagga  
1080  
agaaaactct gaaaacaaaa tcttgttcta tgcaaaagcc ttgataatgt ctctctgcc  
1140  
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1200  
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1260  
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1320  
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1341

&lt;210&gt; 3796

&lt;211&gt; 294

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3796

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Asn Cys Leu Tyr Lys Lys Gly Pro Asp Gly Tyr Asp Pro Gln Phe Ile
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Thr Lys Leu Leu Arg Asn Tyr Arg Ser His Pro Thr Ile Leu Asp Ile
      20           25           30
Pro Asn Gln Leu Tyr Tyr Glu Gly Glu Leu Gln Ala Cys Ala Asp Val
      35           40           45
Val Asp Arg Glu Arg Phe Cys Arg Trp Ala Gly Leu Pro Arg Gln Gly
      50           55           60
Phe Pro Ile Ile Phe His Gly Val Met Gly Lys Asp Glu Arg Glu Gly
65           70           75           80
Asn Ser Pro Ser Phe Phe Asn Pro Glu Glu Ala Ala Thr Val Thr Ser
      85           90           95
Tyr Leu Lys Leu Leu Leu Ala Pro Ser Ser Lys Lys Gly Lys Ala Arg
      100          105          110
Leu Ser Pro Arg Ser Val Gly Val Ile Ser Pro Tyr Arg Lys Gln Val
      115          120          125
Glu Lys Ile Arg Tyr Cys Ile Thr Lys Leu Asp Arg Glu Leu Arg Gly
      130          135          140
Leu Asp Asp Ile Lys Asp Leu Lys Val Gly Ser Val Glu Glu Phe Gln
145          150          155          160
Gly Gln Glu Arg Ser Val Ile Leu Ile Ser Thr Val Arg Ser Ser Gln
      165          170          175
Ser Phe Val Gln Leu Asp Leu Asp Phe Asn Leu Gly Phe Leu Lys Asn
      180          185          190
Pro Lys Arg Phe Asn Val Ala Val Thr Arg Ala Lys Ala Leu Leu Ile
      195          200          205
Ile Val Gly Asn Pro Leu Leu Leu Gly His Asp Pro Asp Trp Lys Val
      210          215          220
Phe Leu Glu Phe Cys Lys Glu Asn Gly Gly Tyr Thr Gly Cys Pro Phe
225          230          235          240
Pro Ala Lys Leu Asp Leu Gln Gln Gly Gln Asn Leu Leu Gln Gly Leu
      245          250          255
Ser Lys Leu Ser Pro Ser Thr Ser Gly Pro His Ser His Asp Tyr Leu
      260          265          270
Pro Gln Glu Arg Glu Gly Glu Gly Gly Leu Ser Leu Gln Val Glu Pro
      275          280          285
Glu Trp Arg Asn Glu Leu
      290

```

<210> 3797

<211> 1970

<212> DNA

<213> Homo sapiens

<400> 3797

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120
ggggtgttcg tgcgctacga ctctgaggcc gacgccact ggtggtcaga gaggacgcac
180

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aagaacttga gcgacatgga gaacgaattc tactatcgct acccaagctt ccaggacgtg  
240  
cacgtgatgg tcttcgtggg cttcggcttc ctcatgactt tcctgcagcg ctacggcttc  
300  
agcgccgtgg gcttcaactt cctgttggca gccttcggca tccagtgggc gctgctcatg  
360  
cagggctggg tccacttctt acaagaccgc tacatcgctg tgggcgtgga gaacctcatc  
420  
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480  
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540  
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720  
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780  
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840  
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1080  
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1140  
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1200  
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1380  
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 1860  
 ccagcatctc ctatgctccc tgggtccccc agacctctct gtgttggtgtg cgtggcagcc  
 1920  
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 1970

<210> 3798  
 <211> 473  
 <212> PRT  
 <213> Homo sapiens

<400> 3798  
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 Val Ile Leu Phe Gly Val Phe Val Arg Tyr Asp Phe Glu Ala Asp Ala  
 20 25 30  
 His Trp Trp Ser Glu Arg Thr His Lys Asn Leu Ser Asp Met Glu Asn  
 35 40 45  
 Glu Phe Tyr Tyr Arg Tyr Pro Ser Phe Gln Asp Val His Val Met Val  
 50 55 60  
 Phe Val Gly Phe Gly Phe Leu Met Thr Phe Leu Gln Arg Tyr Gly Phe  
 65 70 75 80  
 Ser Ala Val Gly Phe Asn Phe Leu Leu Ala Ala Phe Gly Ile Gln Trp  
 85 90 95  
 Ala Leu Leu Met Gln Gly Trp Phe His Phe Leu Gln Asp Arg Tyr Ile  
 100 105 110  
 Val Val Gly Val Glu Asn Leu Ile Asn Ala Asp Phe Cys Val Ala Ser  
 115 120 125  
 Val Cys Val Ala Phe Gly Ala Val Leu Gly Lys Val Ser Pro Ile Gln  
 130 135 140  
 Leu Leu Ile Met Thr Phe Phe Gln Val Thr Leu Phe Ala Val Asn Glu  
 145 150 155 160  
 Phe Ile Leu Leu Asn Leu Leu Lys Val Lys Asp Ala Gly Gly Ser Met  
 165 170 175  
 Thr Ile His Thr Phe Gly Ala Tyr Phe Gly Leu Thr Val Thr Arg Ile  
 180 185 190  
 Leu Tyr Arg Arg Asn Leu Glu Gln Ser Lys Glu Arg Gln Asn Ser Val  
 195 200 205  
 Tyr Gln Ser Asp Leu Phe Ala Met Ile Gly Thr Leu Phe Leu Trp Met  
 210 215 220  
 Tyr Trp Pro Ser Phe Asn Ser Ala Ile Ser Tyr His Gly Asp Ser Gln  
 225 230 235 240  
 His Arg Ala Ala Ile Asn Thr Tyr Cys Ser Leu Ala Ala Cys Val Leu  
 245 250 255  
 Thr Ser Val Ala Ile Ser Ser Ala Leu His Lys Lys Gly Lys Leu Asp  
 260 265 270  
 Met Val His Ile Gln Asn Ala Thr Leu Ala Gly Gly Val Ala Val Gly  
 275 280 285  
 Thr Ala Ala Glu Met Met Leu Met Pro Tyr Gly Ala Leu Ile Ile Gly  
 290 295 300  
 Phe Val Cys Gly Ile Ile Ser Thr Leu Gly Phe Val Tyr Leu Thr Pro  
 305 310 315 320  
 Phe Leu Glu Ser Arg Leu His Ile Gln Asp Thr Cys Gly Ile Asn Asn



```

                325                330                335
Leu His Gly Ile Pro Gly Ile Ile Gly Gly Ile Val Gly Ala Val Thr
                340                345                350
Ala Ala Ser Ala Ser Leu Glu Val Tyr Gly Lys Glu Gly Leu Val His
                355                360                365
Ser Phe Asp Phe Gln Gly Phe Asn Gly Asp Trp Thr Ala Arg Thr Gln
                370                375                380
Gly Lys Phe Gln Ile Tyr Gly Leu Leu Val Thr Leu Ala Met Ala Leu
385                390                395                400
Met Gly Gly Ile Ile Val Gly Leu Ile Leu Arg Leu Pro Phe Trp Gly
                405                410                415
Gln Pro Ser Asp Glu Asn Cys Phe Glu Asp Ala Val Tyr Trp Glu Met
                420                425                430
Pro Glu Gly Asn Ser Thr Val Tyr Ile Pro Glu Asp Pro Thr Phe Lys
                435                440                445
Pro Ser Gly Pro Ser Val Pro Ser Val Pro Met Val Ser Pro Leu Pro
                450                455                460
Met Ala Ser Ser Val Pro Leu Val Pro
465                470

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<210> 3799  
 <211> 210  
 <212> DNA  
 <213> Homo sapiens

```

<400> 3799
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agcaagcaga aggcccggag gagaacaaga tccagctcct cctcctcttc ttccagttct
120
tctagctcct cttcttcctc ctgctcctcc tcctcttcct ccagtgatgg ccggaagaag
180
cgggggaagt acaaggacaa gaggaggaag
210

```

<210> 3800  
 <211> 70  
 <212> PRT  
 <213> Homo sapiens

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<400> 3800
Ser Arg Asn Cys Ser Ala Ser Thr Ser Gln Ala Ser Pro Ser Pro Cys
1          5          10          15
Ile Thr Glu Arg Ser Lys Gln Lys Ala Arg Arg Arg Thr Arg Ser Ser
20          25          30
Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser
35          40          45
Ser Ser Ser Ser Ser Ser Ser Asp Gly Arg Lys Lys Arg Gly Lys Tyr
50          55          60
Lys Asp Lys Arg Arg Lys
65          70

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<210> 3801  
 <211> 4070

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3801

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60  
gctggggccgc gggcagcgtc gcctcacgcg gagcagagct gagctgaagc gggacccgga  
120  
gcccagagcag ccgcccgcct ggcaatcaaa tttctggaag tcatcaagcc cttctgtgtc  
180  
atcctgcccgg aaattcagaa gccagagagg aagattcagt ttaaggagaa agtgctgtgg  
240  
accgctatca ccctctttat cttcttagtg tgctgccaga ttcccctggt tgggatcatg  
300  
tcttcagatt cagctgacct tttctattgg atgagagtga ttctagcctc taacagaggc  
360  
acattgatgg agctagggat ctctcctatt gtcacgtctg gccttataat gcaactcttg  
420  
gctggcgcca agataattga agttggtgac accccaaaag accgagctct cttcaacgga  
480  
gccccaaagt tatttggcat gatcattact atcggccagt ctatcgtgta tgtgatgacc  
540  
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600  
ctctttgttg ctggtttgat tgtcctactt ttggatgagc tgctacagaa gggttacggc  
660  
ttgggggtctg ggatttccct ctttattgcc accaacatct gtgagaccat tgtctggaag  
720  
gccttttagtc ccactaccat taacactggc agaggtactg agtttgaggg tgcagtcata  
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840  
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900  
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960  
cagtacaaca cctatcccat caagctcttc tatacgtcca acatccccat catcctgcag  
1020  
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1080  
aactttttag taaatttact aggacagtgg tcggacacgt cttctggggg cccagcacgt  
1140  
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1200  
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1260  
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1380  
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1500

taccagtact ttgagatctt cgttaaggag caaagcgagg ttggcagcat gggggccctg  
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1800  
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1860  
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1920  
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1980  
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2040  
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2100  
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2160  
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2280  
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2700  
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3120

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 3180  
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 3240  
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 3300  
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 3360  
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 aaccatcggc tgggccctgc aaggcccaca ctacgcctt gtgggtgatg gtcacggtgg  
 3480  
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&lt;210&gt; 3802

&lt;211&gt; 476

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3802

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Pro	Leu	Phe	Gly	Ile	Met	Ser	Asp	Ser	Ala	Asp	Pro	Phe	Tyr	Trp	
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Met	Arg	Val	Ile	Leu	Ala	Ser	Asn	Arg	Gly	Thr	Leu	Met	Glu	Leu	Gly
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 <213> Homo sapiens

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 <213> Homo sapiens

<400> 3806

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<213> Homo sapiens

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&lt;211&gt; 3669

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3815

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<213> Homo sapiens

<400> 3818

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Thr Cys Arg Glu Ala Met Glu Ala Arg Leu Leu Leu Gln Asp Leu Leu
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Leu Phe Ala Lys His Ile Lys Leu Asp Cys Glu Arg Cys Gln Ala Lys
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&lt;211&gt; 535

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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&lt;211&gt; 375

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3822

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&lt;211&gt; 6280

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3823

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<212> PRT

<213> Homo sapiens

<400> 3824

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&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3826

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&lt;211&gt; 1245

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3827

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&lt;211&gt; 726

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3831

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&lt;210&gt; 3832

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3832

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<211> 361

<212> PRT

<213> Homo sapiens

<400> 3834

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Val	Ser	Val	Cys	Asp	His	Cys	Lys	Gly	Lys	Met	Gln	Leu	Val	Ala	Asp	35	40	45	
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Glu	Leu	Gly	Asp	Leu	Val	Val	Ser	Leu	Thr	Glu	Cys	Ser	Ala	His	Ala	115	120	125	
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&lt;210&gt; 3836

&lt;211&gt; 479

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3836

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			20					25					30		
Gly	Gly	Ile	Glu	Gln	Met	Gly	Leu	Ala	Met	Glu	His	Gly	Gly	Ser	Tyr

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465

470

475

&lt;210&gt; 3837

&lt;211&gt; 2084

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3837

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 <211> 468  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Val Leu Gly Leu Ser Val Ala Tyr Trp Leu Lys Lys Leu Glu Ser Arg  
 50 55 60  
 Arg Gly Ala Ile Arg Val Leu Val Val Glu Arg Asp His Thr Tyr Ser  
 65 70 75 80  
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 100 105 110  
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 115 120 125  
 Arg Phe Asn Pro Ser Gly Tyr Leu Leu Leu Ala Ser Glu Lys Asp Ala  
 130 135 140  
 Ala Ala Met Glu Ser Asn Val Lys Val Gln Arg Gln Glu Gly Ala Lys  
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<212> DNA
<213> Homo sapiens
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300
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<211> 252

<212> PRT

<213> Homo sapiens

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Met	Glu	Tyr	Leu	Asn	Ser	Arg	Cys	Val	Leu	Phe	Thr	Tyr	Phe	Gln	Gly	35	40	45	
Asp	Ile	Gly	Ser	Val	Val	Asp	Glu	His	Phe	Ser	Arg	Ala	Leu	Gly	Gln	50	55	60	
Ala	Ile	Thr	Leu	His	Pro	Glu	Ser	Ala	Ile	Ser	Lys	Ser	Lys	Met	Gly	65	70	75	80
Leu	Thr	Pro	Leu	Trp	Arg	Asp	Ser	Ser	Ala	Leu	Ser	Ser	Gln	Arg	Asn	85	90	95	
Ser	Phe	Pro	Thr	Ser	Phe	Trp	Thr	Ser	Ser	Tyr	Gln	Pro	Pro	Pro	Ala	100	105	110	
Pro	Cys	Leu	Gly	Gly	Val	His	Pro	Asp	Phe	Gln	Val	Thr	Gly	Pro	Pro	115	120	125	
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His	Gln	Thr	Gly	Pro	Ala	Pro	Pro	Pro	Ala	Val	Ser	Glu	Ser	Trp	Pro	145	150	155	160
Tyr	Pro	Leu	Thr	Ser	Gln	Val	Ser	Pro	Ser	Tyr	Ser	His	Met	His	Asp	165	170	175	
Val	Tyr	Met	Arg	His	His	His	Pro	His	Ala	His	Met	His	His	Arg	His	180	185	190	
Arg	His	His	His	His	His	His	His	Pro	Pro	Ala	Gly	Ser	Ala	Leu	Asp	195	200	205	
Pro	Ser	Tyr	Gly	Pro	Leu	Leu	Met	Pro	Ser	Val	His	Ala	Ala	Arg	Ile	210	215	220	
Pro	Ala	Pro	Gln	Cys	Asp	Ile	Thr	Lys	Thr	Glu	Pro	Thr	Thr	Val	Thr	225	230	235	240
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<211> 367  
<212> DNA  
<213> Homo sapiens

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<211> 122  
<212> PRT  
<213> Homo sapiens

<400> 3842  
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Glu His Pro Asn Asp Val Arg Cys Ser Ser Thr Leu Val Thr His Ser  
50 55 60  
Lys Gly Tyr Glu Asn Gly Thr Asn Arg Leu Ser Leu Pro Lys Pro Ile  
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Leu Lys Ser Glu Lys Asn Lys Pro Leu Asp Pro Glu Met Gln Cys Leu  
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<210> 3843  
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<212> DNA  
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<210> 3844  
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 <212> PRT  
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 35 40 45  
 Ala Pro Gly Ala Glu Ala Ser Pro Ser Pro Cys Ile Thr Glu Arg Ser  
 50 55 60  
 Lys Gln Lys Ala Arg Arg Arg Thr Arg Ser Ser Ser Ser Ser Ser Ser  
 65 70 75 80  
 Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser  
 85 90 95  
 Ser Ser Asp Gly Arg Lys Lys Arg Gly Lys Tyr Lys Asp Lys Arg Arg  
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 Lys Lys Lys Lys Lys Arg Lys Lys Leu Lys Lys Lys Gly Lys Glu Lys  
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<210> 3845  
 <211> 2302  
 <212> DNA  
 <213> Homo sapiens

<400> 3845

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<210> 3846  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 3846  
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 Gly Pro Ala Glu Pro Arg Val Ala Gly Ala Gly Ala Ala Ala Glu  
 35 40 45  
 Gly Ala Ala Ala Gly Ala Cys Gly Pro Ala Arg Cys Ala Asp Gln Gly  
 50 55 60  
 Gly Ala Arg Glu Arg Gly Gly Arg Gly Gly Arg Gly Ala Gly Gly Gly  
 65 70 75 80  
 Gly Gly Ala His Gly His Phe Pro Gln Arg Pro Pro Gln Gln Ala Gly  
 85 90 95  
 Gln Arg Ala Ala Ser Arg Ala Gly Cys Gly His Arg Gln Leu Gln Arg  
 100 105 110  
 Ala Pro Ala Pro Gly Leu Arg Gln His Pro Cys Gly Ser Gly Thr Glu  
 115 120 125  
 Gly Leu Arg Gly Gly His Leu Ser Glu Thr Val Cys Ala His Ala Glu  
 130 135 140  
 Arg Thr Gln Ala Pro Leu Gln Ser Ala Leu Gly Gln Pro Ala Pro Arg  
 145 150 155 160  
 Pro His Thr Leu Gln Arg His Leu Gly Pro His Ala Thr Gly His Gly  
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Cys Cys Phe Pro Gly  
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<210> 3847  
<211> 1570  
<212> DNA  
<213> Homo sapiens

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300  
ccaacctgtg ctggccacca aggggcagtg atcagatatg gctcctgccc tccacacgct  
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420  
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480  
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1320

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<210> 3848  
<211> 120  
<212> PRT  
<213> Homo sapiens

<400> 3848  
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Asn Met Asn Thr Leu Tyr Pro Asp Ala Thr Pro Glu Glu Leu Gln Ala  
35 40 45  
Met Asp Asn Val Cys Ile Ile Cys Arg Glu Glu Met Val Thr Gly Ala  
50 55 60  
Lys Arg Leu Pro Cys Asn His Ile Phe His Thr Arg Trp Glu Gly Pro  
65 70 75 80  
Trp Gly Ala Cys Pro Ala Gly Pro Arg Pro Gln Lys Ala Gly Pro Lys  
85 90 95  
Gly Pro Ala Asp Leu Cys Leu Ala Leu Thr Arg Ser Cys Leu Arg Ser  
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Trp Phe Gln Arg Gln Gln Thr Cys  
115 120

<210> 3849  
<211> 1139  
<212> DNA  
<213> Homo sapiens

<400> 3849  
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120  
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240  
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360  
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420